

A TEXT BOOK FOR SCHOOLS



PREVENTION OF HIV/AIDS



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PREFACE

More than ever before, educational institutions are aware of the devastating consequences of the outbreak of AIDS. A decade ago, it would have been inconceivable for schools to address such issues as HIV/AIDS. The relentless spread of HIV/AIDS has unfolded its grave consequences on the health and behaviour pattern of people every wall of life. HIV/AIDS has caused a global pandemic. In the last million people estimated to be infected with HIV, it is estimated that a

PREVENTION OF HIV/AIDS

This volume "Prevention of HIV/AIDS" is a textbook for schools. It is written by Dr. Ashok Kumar, Goldakshara, New Delhi - 110 001.

The book is divided into four chapters. Chapter I deals with the meaning of HIV/AIDS, its transmission, and its prevention. Chapter II deals with the symptoms and signs of HIV/AIDS. Chapter III deals with the treatment of HIV/AIDS. Chapter IV deals with the social and psychological aspects of HIV/AIDS. The book is written in a simple and easy-to-understand language. It is suitable for students of schools. The book is written by Dr. Ashok Kumar, Goldakshara, New Delhi - 110 001.



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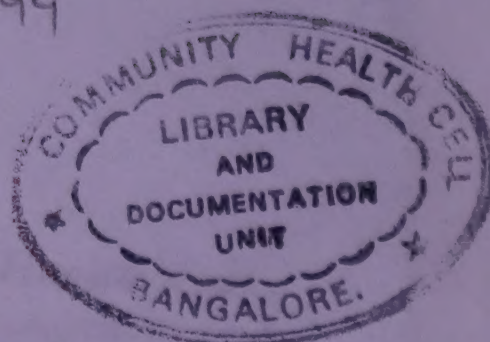
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PREFACE

More than any time before, educational institutions are now aware of the devastating consequences of the onslaught of AIDS pandemic. About a decade ago, it would have been inconceivable for school health educators in India to accord attention to issues such as HIV/AIDS. The relentless spread of HIV/AIDS in the recent past has unfolded its grave consequences on the health and behaviour pattern of people from every walk of life. HIV/AIDS has crossed all boundaries. The situation in India, with over 5 million people estimated to be infected with HIV, is extremely alarming. In the absence of a drug for cure and vaccine for prevention, education for prevention is the only effective option available with us to contain the further spread of HIV.

This volume *"Prevention of HIV/AIDS: A school text book"* provides factual information on several questions being asked. Dr. Gracious Thomas, has meticulously prepared this book which has twelve chapters beginning with the basic information on the body's defence system to the issues concerning prevention, counselling and care to be given to the HIV infected. Through the successful completion of the five exercises given at the end of each chapter, a learner will be able to acquire sufficient information on the what, why and how of the problems associated with HIV/AIDS. Together with the appendices providing most useful information and the well prepared glossary, this unique book certainly has the credibility to join the corpus of literature on HIV/AIDS prepared across the globe for school health education.

Fr. George Pereira
Executive Secretary, CBCI Commission for Health and
Deputy Secretary General, CBCI

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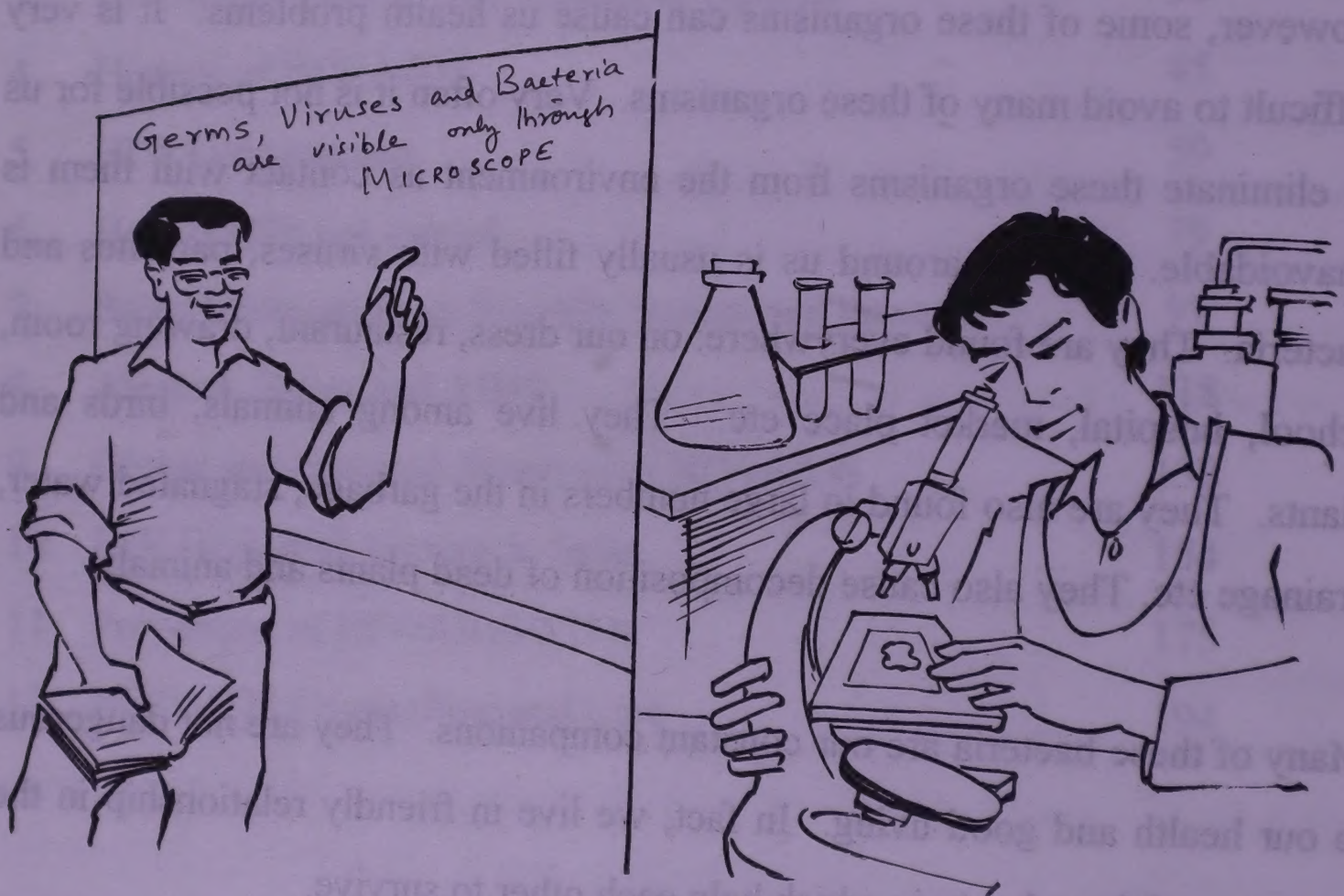
BASIC INFORMATION ON BODY'S DEFENCE SYSTEM

We are familiar with the term pollution! There are various types of pollution such as: water pollution, air pollution, sound pollution, etc. These can cause various illnesses. There are several types of unseen organisms existing around us. Very often it is difficult to detect them with our naked eyes. However, some of these organisms can cause us health problems. It is very difficult to avoid many of these organisms. Very often it is not possible for us to eliminate these organisms from the environment as contact with them is unavoidable. The air around us is usually filled with viruses, parasites and bacteria. They are found everywhere: on our dress, restaurant, drawing room, school, hospital, market place etc. They live among animals, birds and plants. They are also found in large numbers in the garbage, stagnated water, drainage etc. They also cause decomposition of dead plants and animals.

Many of these bacteria are our constant companions. They are not dangerous to our health and good living. In fact, we live in friendly relationship in the company of these bacteria which help each other to survive.

It is important to know that most of these friendly bacteria live on the mucous membranes that line our body's natural opening. They help protect ourselves in potentially harmful situations. It is interesting to know that most of the body's undesirable invaders are overcome by the natural pesticides in sweat,

saliva and tears. They are also dissolved by stomach acids, or trapped in the sticky mucous of the nose and throat before being expelled by a sneeze or cough. Some of the viruses and bacteria that can make people sick. The ones that can make us sick are called germs. There are many kinds of germs. They cannot be seen through naked eyes.



Sometimes these organisms which can cause disease may enter the bloodstream of our body. If they enter the bloodstream and tissues, they will

multiply fast and start destroying, vital body cells. In most situations, the body defeat these invaders. Thus we recover from ordinary diseases like common cold or a flu.

The AIDS Disease

A disease is a sickness that causes parts of the body to stop normal functioning. AIDS is a life-threatening disease. It is caused by a deadly virus. This virus is called HIV. A virus is an extremely small organism visible only through an electron microscope. There are different types of viruses. Those that cause diseases are known as germs. There are many kinds of germs just as there are different types of diseases.

Communicable and Non - Communicable Diseases

Some of the diseases can be passed from one person to another. These diseases are called communicable diseases. Influenza, common cold and chickenpox are examples of communicable diseases. There are also non communicable diseases. They cannot be passed from one person to another. Heart disease, cancer, diabetes and cataract are some of the examples of non communicable diseases.

AIDS is a communicable disease. However, this disease cannot be easily passed on from one person to another like the common cold. AIDS cannot be spread through air, water or ordinary contacts. It can be spread only through

certain specific routes. We shall discuss those details in a separate chapter in this book.

There are at least two known ways to protect ourselves against a communicable disease. One sure way to protect our body from such diseases is to keep the body free from germs. In other words, we should not allow germs to enter our body. The second way to protect our body from communicable diseases is to use our body's own defence system against the germs which have entered our body.

Body's Defence System

Every human body has a defence system to protect the body from diseases. This defence system is known as the immune system. Our body's immune system helps in fighting off germs that enter our body.

Our body has several parts and organs which are made up of small units. These units are called "cells". There are different types of cells in our body. For example, there are bone cells, blood cells, muscle cells, skin cells, etc. in our body. If we are infected with the virus (HIV) which causes AIDS, our immune system becomes weak. The HIV destroys the cells that are responsible for our body's immune system. If the cells are destroyed, then our body will be unable to fight off germs. Therefore if we are infected by the AIDS virus, we become sick and die faster than any other normal person.



(a) White blood cells guard our body against diseases. (b) They fight germs that attack our body. (c) Serious illnesses make us sick during fight against germs, but finally white blood cells win. (d) If HIV enters our body, it will destroy white blood cells. (e) After white blood cells are attacked, our body loses all types of protection. (f) Without white blood cells diseases can attack our body. (g) Once HIV has weakened us any disease can take over our body.

Functioning of Immune System

The immune system within our body functions like an army. Usually an army consists of hundreds of thousands of persons. They keep round the clock vigil to safeguard and protect the country. Similarly our body consists of special blood cells. These blood cells fight off the germs that enter our body. Our body constantly keep producing millions of blood cells. These blood cells are in fact part of our body's immune system.

There are two types of Cells in our body: 1) Phagocytes and 2) Lymphocytes. Phagocytes destroy all types of external particles entering into our blood stream. Lymphocytes are white blood cells. They kill the germs that attack our body. There are different types of white blood cells. Two of these types which are important for fighting off the germs are T-cells and B-cells.

When a germ enters our body and attacks our immune system, the Phagocytes become activated. They send signals to the T-cells. The first T-cells which are alerted are called Helper T-cells. Although they don't fight, they convey emergency messages to other special cells. These special cells destroy the virus as well as the cells within our body that the virus has infected.

The Helper T-cells also convey emergency signals to the B-cells. The B-cells produce antibodies which fight the germs. Therefore the Helper T-cells function as an alarm system within our body. In the absence of this alarm system, our body's immune system or defence system becomes non-functional.

HIV and Helper T-Cells

The HIV AIDS virus is a unique Virus. It immediately kills the Helper T-cells after entering our body. Therefore the Helper T-cells are not able to send any signal to other special T-cells and B-cells. Thus HIV AIDS virus hinders our immune system from protecting our body. Once HIV has attacked our immune system, our defence system becomes weakened. It will help the germs to take over our body and we become sick. Since we do not have a strong immune system to fight off the germs, day by day our body will become weaker and weaker gradually. This will lead us to an early death.

People with HIV/AIDS virus are deprived of Helper T-cells. Therefore it is easy for them to develop infections that people with normal Helper T-cells do not get. These infections take the opportunity of the weak immune system of our body. Since our body's alarm system does not work in the absence of the Helper T-cells, the germs causing infections enter our body. These infections are called "opportunistic infections". Once infected with any kind of a disease, people with HIV/AIDS virus will stay sick all through. They normally have an untimely death.

Exercise # 1.1

Match the following

- | | |
|--------------------------|------------------------------|
| 1. Organism | 1. Influenza and common cold |
| 2. Cancer | 2. Antibodies |
| 3. Mucous membranes | 3. Immune system |
| 4. AIDS | 4. Bacteria |
| 5. Communicable Diseases | 5. HIV can be seen |
| 6. Defence system | 6. Alarm system |
| 7. Lymphocytes | 7. Non-communicable disease |
| 8. B-Cells | 8. Life threatening disease |
| 9. Helper T-cells | 9. Friendly bacteria |
| 10. Electron Microscope | 10. White blood cells |

Exercise # 1.2

Mark (✓) 'true' or 'false' or 'do not know' against each of the following statements.

		True	False	Do not know
1.	Some of the organisms can make a person sick.			
2.	The environment around us is filled with viruses, and bacteria.			
3.	Viruses, and bacteria are unseen organisms.			
4.	Bacteria are our constant companions.			
5.	Bacteria prevent us from becoming sick.			
6.	AIDS can spread through air and water.			
7.	AIDS is a sickness caused by a virus.			
8.	Antibodies function as an alarm system within our body.			
9.	Heart disease, cancer and diabetes are communicable diseases.			
10.	People with HIV/AIDS virus has plenty of Helper T-cells.			
11.	Lymphocytes kill the germs that attack our body.			
12.	The helper T-Cells produce antibodies.			
13.	Once HIV has attacked our immune system, the defence system of our body becomes strong.			
14.	AIDS is not a communicable disease.			
15.	Communicable diseases can be passed from one person to another.			
16.	The bacteria and viruses which can make us sick are called AIDS.			

Exercise # 1.3

Answer the following questions in brief

1. Name three types of commonly known pollution.
2. How can you say that bacteria are our constant companions?
3. How can bacteria and viruses make a person sick?
4. Why people with HIV normally have an untimely death?
5. How can we protect ourselves from communicable diseases?
6. Name some of the cells found in human body?
7. What is a disease?
8. What is a virus?
9. What are germs?
10. What are cells?
11. What is an immune system?
12. What is the function of phagocytes in our body?
13. What is the job of Helper T-Cells in our body?

14. What are antibodies?

15. What do you mean by opportunistic infections?

Exercise # 1.4

Fill in the blanks

1. is a life threatening disease.
2. AIDS is caused by
3. is a communicable disease.
4. is a non-communicable disease.
5. Friendly bacteria live on the that line our body's natural openings.
6. The viruses and bacteria that can make people sick are called
7. A virus can be seen through an microscope.
8. The defence system of our body is known as
9. The immune system within our body functions like an
10. Lymphocytes are cells.

11. Antibodies are produced by the cells.

12. People with HIV/AIDS virus are deprived of cells.

Exercise # 1.5

Role play

Objectives

1. To help the students to understand how the immune system work in body.
2. To show how HIV/AIDS virus attack the body's defence system and make it weak

In the role play, the participants will demonstrate how the germs or virus enter the body--attack the immune system--destroy Helper-T cells--how opportunistic infections invade the body and kill the patient.

(Choose adequate number of volunteers depending upon the number of students in a class or group. For each stage, different volunteers with separate placards may be chosen.)

Time

One period

What to do

Provide an outline to the students based on chapter one: **Functioning of the immune system.**

1. Ask for volunteers (3 to 5) who will take the role of soldiers in an army.
The army will protect one volunteer i.e. potential patient (a volunteer).
2. A placard with the inscription “soldier” may be hung from each ones neck.
3. They safeguard and protect the body i.e. potential patient (hang placard).
4. Two volunteers take the role of white blood cells (hang placards)
5. Two volunteers each take the role of Phagocytes and Lymphocytes (hang placards)
6. One volunteer takes the role of T-cell (hang placard).
7. One volunteer takes the role of B-Cell (hang placard)
8. Two volunteers to act as “special cells” (hang placard)
9. Two volunteers act as germs/AIDS virus (hang placard)
10. They enter the body and attack immune system (demonstrate the war in the classroom).

BASIC INFORMATION ON HIV/AIDS DISEASE

The first cases of AIDS were diagnosed in 1981. Some physicians in California and New York came across unusual opportunistic infections among homosexual men. These infections did not respond to medication. Therefore the patients could not live longer and eventually died. These patients did not show usual conditions of illnesses known to Medical Science at that time. Thus it became evident that we have a new illness to be treated. This new disease was named “Acquired Immuno-deficiency Syndrome” (AIDS).

Acquired Immuno-Deficiency Syndrome (AIDS)

The San Francisco AIDS Foundation has explained the acronym AIDS as:

- A = Acquired - not born with
- I = Immune - body's defence system
- D = Deficiency - not working properly
- S = Syndrome - a group of signs and symptoms.

The word acquired was chosen because the disease was neither genetically determined nor, the result of other conditions. In other words, it was acquired during a normal period of life. Several years lapsed between the identification of the virus that caused AIDS and the first reports of AIDS cases. So far in all cases, the development of HIV in the human body leading to AIDS has proved to be fatal. In other words they died of AIDS defining illnesses.

Therefore AIDS is not a single disease. It is a set of diseases which results from the destruction of the body's defence system. This destruction is done by the Human Immunodeficiency Virus (HIV).

Human Immunodeficiency Virus (HIV)

HIV is a very small and fragile virus. It cannot survive outside the human body. Therefore it is not a contagious disease. It cannot be passed from one person to another easily like a common cold or flu virus, nor can it be passed through ordinary social contacts.

HIV is a member of a group of viruses called retroviruses. Retroviruses are simple microscopic organisms dependant on a host for reproduction. These microscopic organisms lack an independant metabolism. Therefore they cannot grow without energy and nutrients supplied by a host cell.

An HIV infected person may continue to live a perfectly normal life without showing any physical symptoms. Such a situation is called HIV non-Symptomatic. Once the disease progresses, the person will begin to have different illnesses. He/she may also show certain physical symptoms. The situation is called HIV symptomatic. The term 'AIDS' is used when the disease has progressed and the person develops one or more serious infections or conditions.

HIV was first described in 1983 in Paris. It has had several names during its short history of less than two decades. But HIV has now been accepted internationally. Some people also call it the "AIDS Virus".

The Virus enters the Helper T-cells of the immune system. In the cells, it destroys genetic material. The damage caused is permanent. All body fluids contain Helper T-cells. The concentration is high in blood, semen and vaginal secretion.

HIV Carrier

Anybody who has the HIV/AIDS virus is a carrier. He/She can infect others. Very often the person does not know that he/she is a carrier. He/she has no symptoms of disease and the person who infected him/her may have had no



symptoms, either. A person can be a carrier unknowingly for many years before the virus has destroyed so much of the immune system that he/she falls ill. Some months after the infection, the body produces antibodies to the virus. These can be detected by a special test.

Window Period

The period of time after a person becomes infected with HIV, but before antibodies have been formed is called Window Period. This period is usually two to three weeks and is rarely longer than three months. The virus is present in the blood. It can be detected by an antigen test. But an antibody test will prove negative. It may be noted that the antibodies developed against HIV within the body are not capable of fighting off the germs.

Incubation Period

Incubation period is the time limit between infection with HIV, and the development of an AIDS defining condition. The exact limits of incubation period for AIDS is not known. However, some facts are available based on certain reported AIDS cases. These cases show that the incubation period can be of five months in some cases. It can also be 10 years or 18 or more. This is because HIV/AIDS virus was identified about 18 years ago. We may be in better position to provide more accurate time period after passing through, say another decade of fighting the HIV/AIDS virus.

The few HIV and full blown AIDS cases reported in India so far do not provide details about the exact time of infection. Further, the testing system within the country is neither well equipped nor adequately manned by trained personnel competent enough to handle the cases efficiently. The HIV infected persons in India have to face a number of hurdles before approaching a testing center. Even then, they are not very forthcoming, with a proper frame of mind to discuss and disclose facts with sincerity and openness. Therefore the few cases that are recorded cannot be reliably used to predict the incubation period.

Symptoms of HIV

Signs and Symptoms of HIV infections are similar to the signs and symptoms of many other diseases. The presence of certain signs and symptoms do not necessarily indicate HIV infection in a patient. Therefore if the signs and symptoms continue in a patient for a longer period - say, about a month he/she should seek medical attention. One may need a pre-test counselling and opt for an HIV test. Usually most people have a prolonged period without illness after the infection with HIV/AIDS virus. In such people, AIDS may develop after several years of their exposure to the virus. Analysis of AIDS cases from around the world indicate that about fifty per cent of HIV infected people develop AIDS within about ten years of infection. There are several types of illnesses that the HIV/AIDS virus can develop in a person. These illnesses will eventually result in the development of full-blown AIDS. Some of the signs and symptoms or illnesses noticed among the HIV infected are:

- * Loss of about ten per cent of weight.
- * Chronic diarrhoea and vomiting.
- * Prolonged fever without an identifiable source.
- * Development of pneumonia.
- * Development of certain types of Cancer.
- * Abnormalities with skin, glands and eyes.
- * Acute transient illness with fever, muscle aches, headaches, rash or sore throat.
- * Experience of fatigue and malaise.
- * Lymph nodes may often enlarge around the time of Sero-Conversion i.e. the point where antibodies against HIV are produced for the first time.
- * Development of oral, anal and penile ulcers and herpes zoster.
- * Gastrointestinal symptoms including nausea.
- * Coughing or shortness of breath and seizures.
- * Loss of normal thought process caused by brain infections.

The advanced stage of HIV infection is AIDS. The symptoms of AIDS will differ from person to person. It will depend on the immunodeficiency of the individual. Most of the health problems faced by AIDS patients are caused by opportunistic infections. Every part of an AIDS patient can be affected by one or another opportunistic infection.

Stages of HIV Development

There are five stages in the development of HIV infection. They are:

- i) Initial HIV infection
- ii) PGL (persistently enlarged lymph glands)
- iii) ARC (AIDS Related Complex)
- iv) Full blown AIDS, and
- v) AIDS dementia.

Every individual may not go through each of these stages. Some patients may show no clear signs of any illness before developing full-blown AIDS. Some others may live for months or even years, with no symptoms beyond enlarged glands in the neck.

The specific symptoms of each of the five stages are summarised below. These are largely based on North American and European experience. It may be noted that the symptoms vary considerably from one part of the world to another. Further, we have very limited clinical research available on the subject from developing countries including India.

i) Initial HIV Infection

Within a few weeks of HIV entering the body, some people experience a temporary “Sero-Conversion illness”. This may resemble influenza or glandular fever. During this period, the immune system produces antibodies to HIV, which do not succeed in overcoming the virus. This is usually followed by a period of months or years in which no further symptoms appear. However, during this period the infected person is capable of transmitting the virus to others.

ii) PGL (Persistently enlarged glands)

After the complications experienced during the initial HIV infection stage, the second stage may begin with the enlargement of lymph glands in the neck, armpit or groin. This can be accompanied by fevers, night sweats, loss of weight and oral thrush. Oral thrush is a fungus infection inside the mouth. When these symptoms appear, infected people in developed countries usually seek medication. They visit a counsellor or their physician on their own. But for most people in developing countries, these symptoms are indistinguishable from common infections - people in the third world countries very seldom feel the need to visit a doctor for such illnesses. In remote areas of large countries like India, even treatments are hardly available for such illnesses. Therefore people ignore these developments.

iii) AIDS Related Complex (ARC)

By the time one reaches the third stage, the AIDS virus has already damaged the immune system to a great extent. Many opportunistic infections occur during this period. The symptoms during this period include fatigue, unexplained diarrhoea lasting longer than one month, loss of more than ten per cent body weight, fevers and night sweats. Oral thrush, PGL or enlargement of spleen may also occur.



iv) Full-blown AIDS

By the time an infected person reaches the fourth stage, his/her immune system collapses. The patient is now faced with major life-threatening infections. Pneumonia caused by the parasitic *pneumocystis carinii* is common. A type of cancer affecting the skin called Kaposi's Sarcoma is also common in many patients. These symptoms have been found among most patients in United States. In certain parts of Africa, a wasting condition called "slim disease" linked to persistent diarrhoea, is common. The patient usually becomes thin and grossly fatigued. Very often the patient also suffers from multiple infections like herpes and tuberculosis. Full-blown AIDS seems to be fatal. Some patients with regular medication, exercise and care have lived longer. However, they survive for not more than three or four years. Experience in India shows that most patients diagnosed with full-blown AIDS die within less than six months of the diagnoses. In exceptional cases, some have survived for one to two years.

v) AIDS Dementia

The HIV/AIDS virus may pass through the blood brain barrier. This can destroy certain brain cells. Destruction to brain cells brings about symptoms ranging from mild confusion memory loss and deteriorating thought processes. During this stage, a patient will require complete care and support. In most of the full-blown AIDS cases, patients are found to be suffering from illnesses involving the brain or nervous system. This in fact, takes the patient to his/her last days on earth.

Exercise # 2.1

Answer the following questions in brief

1. Describe the concept and meaning of AIDS.
2. Write the full form of HIV, AIDS and ARC.
3. Write a short note on HIV.
4. Briefly explain the concept "HIV carrier".
5. What is 'window period'?
6. What is meant by 'incubation period'?
7. List out some of the symptoms found in an HIV infected.
8. Describe the initial stage of HIV infection in a person.
9. What do you understand by PGL?
10. Describe the stage of 'full-blown AIDS'.
11. Describe the concept "AIDS Dementia".
12. List out the five stages of HIV development.

Exercise # 2.2

Fill in the blanks

1. The first AIDS cases were diagnosed in the year
2. The first AIDS cases were reported from and
in USA.
3. The first AIDS cases were detected in men.
4. HIV is a member of a group of viruses called “.....”
5. The AIDS virus enter the Helper T-cells and destroy
.....
6. Counselling given before an HIV test is known as
7. There are stages in the development of HIV infection.
8. The full form of ARC
9. Kapozi's sarcoma is a type of usually affecting skin of an
HIV infected.
10. Incubation period is the time limit between infection with
and the development of defining condition.

Exercise # 2.3

Match the following

- | | |
|--|----------------------------------|
| 1. Acquired Immuno-Deficiency Syndrome | 1. Independent metabolism |
| 2. Symptom of HIV | 2. ARC |
| 3. Opportunistic infection | 3. Human immuno-deficiency virus |
| 4. Drug used for AIDS treatment | 4. ELISA |
| 5. HIV was first described in | 5. Tuberculosis |
| 6. HIV has no | 6. Sweat |
| 7. AIDS related complex | 7. AIDS |
| 8. HIV | 8. Paris |
| 9. AIDS Virus is not found | 9. Loss of about 10% of weight |
| 10. AIDS test | 10. AZT |

Exercise # 2.4

Debate

Objectives

1. To help the students to understand various issues associated with HIV/AIDS.
2. To help the students to analyse various concerns of people and society arising out of the AIDS pandemic.

What to do

1. Invite at least six volunteers.
2. Divide them into two groups of three each.
3. Additional members can be added in equal numbers to both the groups.
4. Write down the topics on small chits and keep them in a box.
5. Ask each group to send their leader.
6. The teacher directs one of the group leaders to pick up a chit.

7. The topic is read out to the students.

8. One group will speak for the motion and the other against it.

9. They may be given sufficient time to prepare. In some cases, a teacher may give them as many as five or seven days to prepare. This will enable them to do library work and discuss with other experts to collect sufficient materials.

10. The time duration may vary from forty-five minutes to one or one and a half hours.

Topics

1. AIDS is a curse send by God.

2. AIDS is a disease affecting adults only.

3. AIDS is a disease spread by people living immoral lives.

4. AIDS infected people should be thrown out of the community.

5. AIDS will lead to the end of human race on earth.

6. AIDS is a disease of Western people and not of Indians.

Exercise # 2.5

Question Box

Objective

1. To help the students to clear all their doubts regarding basic information about HIV/AIDS in a classroom atmosphere.

What to do

1. A question box which has a lock is to be kept in the classroom.
2. Students may be directed to write down or type questions relating to HIV/AIDS and related issues and drop them in the box.
3. The teacher can give them two options:
 - (a) That he/she will keep confidential, the name of the person putting the question; or
 - (b) Ask the students not to mention their names, if they do not want their companions to know such details.
4. The teacher will instruct the students not to put questions for the sake of creating fun in the class.
5. If the teacher comes across a question which is not of serious nature or relevant on the topic of discussion, such questions may not be taken up for discussion.
6. Only those questions which may be useful to clear certain doubts of students will be answered by the teacher.
7. Some teachers may initially ask the students to answer the question. Only if the class fail to give a right answer, the teacher will answer.

HIV/AIDS TESTING AND TREATMENT OPTIONS

The only way to confirm whether one has HIV or AIDS is to go for an HIV/AIDS test. Mere symptoms of the disease in a person alone is not enough to conclude that one is an AIDS patient. People who have exposed themselves to high risk behaviour or such situations may go for an HIV/AIDS test. However, such persons may have to seek the opinion of a Counsellor, Social Worker, Psychologist, physician or family doctor.

Voluntary Testing

Voluntary testing is recommended for the following groups in India:

- * Past and present intravenous drug users and their sexual partners;
- * Prostitutes, devadasis and their sexual partners;
- * Homosexual and bisexual men and their sexual partners;
- * Lesbians and their partners;
- * Individuals donating blood, organs, tissues, semen and milk;
- * Recipients of blood not tested for HIV;
- * Recipients of organs, tissues, milk and semen from donors who are not subjected to HIV test;

- * Eunuchs involved in sexual activities particularly with homosexual men;
- * Foreign nationals entering India for a long stay;
- * Prison inmates involved in homosexual/lesbian activities within the jails;
- * Persons involved in extra-marital and pre-marital sex;
- * Persons having more than one sexual partner;
- * Persons having symptoms of HIV/AIDS
- * Children of prostitutes;
- * Street children involved in sex and drug abuse;
- * Police and defence personnel involved in homosexual and lesbian activities;
- * Truck drivers who indulge in sexual activities on the highways;
- * Defence personnel returning from foreign assignments if they were engaged in extra-marital sexual activities abroad or if they have received donated blood or human organs;
- * Persons who got their whole or parts of the body tattooed;
- * Children of HIV positive women;
- * Tribal women who practice prostitution as their traditional profession and their partners;

- * Physicians and para-medical personnel who frequently get hurt while performing surgery or administering injection particularly if they have a fear of contracting HIV;
- * Haemophiliacs who have received blood clotting factors;
- * Sexual partners of HIV infected people or of people in the preceding groups; and
- * Thalassemia patients.

HIV/AIDS Test

Two of the most commonly used tests are known as (i) ELISA (enzyme-linked immunosorbent assay) and (ii) WESTERN BLOT. The ELISA test is significantly cheaper than the Western Blot test. When an ELISA test show positive results, one should not conclude that the person has HIV. In order to confirm the presence of HIV in the blood, a confirmatory test has to be performed. The Western Blot is the confirmatory test which will specifically say whether one has HIV or not.

Elisa Test

In ELISA, blood and other body fluids are tested with indicator solutions that detect the presence of antibodies directed against HIV. In India, usually blood samples are used for ELISA test. Tiny volumes of solutions are required for ELISA test. It is usually automated to yield accurate results.

This will reduce the chances of any type of error. However, it is possible that at any time inaccurate results are also obtained. It is estimated that over 99 per cent accurate results can be received if: (i) ELISA test is carefully conducted, and (ii) appropriate use of confirmatory procedures are followed.



The ELISA test can indicate whether antibodies against HIV are present or not. If antibodies are found to be present, then we have to determine two things: (i) whether these antibodies are caused by infection with HIV; and, (ii) whether the test has detected antibodies that are crossreactive with HIV antibodies without the presence of HIV. This is possible only by using a more sophisticated test, namely, the Western Blot. Therefore Western Blot test should be made mandatory in all the cases of ELISA positive results. This will help us to confirm whether one is HIV positive or not. The ELISA test kits available in the country are imported from abroad. There are also several reports indicating that many of these kits are faulty or defective. Therefore one should always take care to go for a Western Blot test to confirm results.

Western Blot Test

The Western Blot is a less sensitive test than the ELISA. It follows a slightly different approach than the ELISA test. A negative ELISA normally does not require further testing. However, it will depend on the place, person and equipment involved in conducting the test. Your Counsellor or doctor will help you in clarifying the matter. In any case, you should allow sufficient time gap between the time of infection and the time of testing. This is because, the body requires sufficient time to develop antibodies against HIV. To have a more accurate result, it is recommended that one may wait for about six months for undergoing a test. You can also opt for a test after six weeks from the time of exposure. In the event of a negative result, it is

always safer to have a second test after six months from the time of the exposure. It may also be noted that one will have to repeat the ELISA test after every subsequent exposure to HIV. In short, one may say that a negative Western Blot test rules out HIV infection while a positive Western Blot test confirms HIV infection.

HIV has been detected in blood, breast milk, cerebrospinal fluid, feces, saliva, semen, tears, human tissue, urine and vaginal/cervical secretions. So far the virus has not been found in the sweat of a person. In some advanced countries, physician also test saliva to detect the virus. However, blood is the most common and a sure fluid which can provide authentic results.

Who Should Avoid Donation of Blood?

Much has been learned about the spread of HIV through blood and blood products. It is therefore suggested that the following groups may refrain from donation of blood, human tissues and organs:

1. People who have tested positive for HIV;
2. Men who have had sexual contact with a prostitute or involved in extra-marital sex and their partners;
3. Man who had sex with another man;
4. Persons involved in prostitution;

5. Eunuchs involved in sexual activities with men and their partners;
6. Truck drivers who indulge in sexual activities on highways and their partners;
7. Intravenous drug users;
8. Recipients of transfusion of blood, semen, human organs or tissues;
9. Persons stuck with a needle from a health care centre after 1981 for tetanus injection, acupuncture or for any other medical purpose.
10. People who got their ears or nose pierced; or any part of the body tattooed;
11. Women involved in lesbian activities;
12. Hemophiliciacs who have received clotting factor concentrates; and
13. Rape victims and their partners.

Treatment Options

Till date no vaccine or preventive drugs have been developed to prevent and control the spread of HIV. Efforts are being made by medical researchers and pharmaceutical companies to develop a vaccine as well as drugs for the treatment, cure and prevention of HIV. However, some drugs are available which sustain the immune system of the body for some more time. An HIV infected person should seek the opinion of his/her counsellor, social worker, psychologist or family doctor before opting for any medication.



At present, there is no therapy available for treatment and cure of HIV infection. There is certainly an improvement in the treatment efforts. The current treatment consists mainly of fighting symptoms of the “opportunistic” infections. Some of the opportunistic infections like pneumonia, fungal infection, tuberculosis, cancer and diarrhoea take advantage of the victim’s damaged system. If the treatment is stopped, the same or a different type of infection appears.

One of the best known drugs largely been used is Zidovudine (AZT). AZT has been shown to delay the onset of AIDS in people with no or minor symptoms of HIV infection. It can be taken orally. AZT has been approved for use against AIDS in several advanced countries. Experiments show that AZT improves clinical signs and delays death for some time. However, it does cause anaemia in several patients. Sometimes such patients require blood transfusions. Thus, it has its side-effects. AZT does destroy the virus permanently which has already infected the cells. Since it is an expensive drug, ordinary people in India cannot afford to use it.

Ayurvedic Treatment

It is encouraging to note that our Ayurvedic physicians from India are involved in research to develop medicines for AIDS disease. Currently scores of HIV infected patients are undergoing Ayurvedic treatment in the country. A number of HIV infected patients from abroad also come to India for Ayurvedic treatment.

Ayurvedic treatment does not claim to have cured anyone of the HIV virus. But it has achieved certain break throughs in helping the patients to sustain his/her immune system at least for some time. One such hospital in the country, namely, the Amala Hospital is situated at Trichur in Kerala. Hundreds of patients are taking Ayurvedic treatment from this hospital.

Exercise # 3.1

Answer the following questions in brief

1. How can a person know whether he/she is infected with HIV or not?
2. Write a short note on ELISA test.
3. What do you understand by Western Blot test?
4. Describe briefly the treatment options available for HIV/AIDS in India.
5. What do you know about Ayurvedic treatment for HIV/AIDS?
6. List out the type of people who may require pre-test counselling in India.
7. Mere symptoms of disease in a person is not enough to conclude that one is HIV infected. Why?
8. Why should one go for a Western Blot test?
9. Who are the professionals to whom an HIV infected person may go for guidance?
10. What do you know about AZT?
11. List out the categories of people who should avoid donation of blood, tissues and organs.

Exercise # 3.2

Match the following

- | | |
|--------------------------------------|--|
| 1. Enzyme-linked immunosorbent assay | 1. Western Blot test |
| 2. Counselling | 2. HIV found |
| 3. Western Blot test | 3. Fights symptoms of opportunistic infections |
| 4. Confirmatory test | 4. Blood transfusion |
| 5. Positive Western Blot | 5. Diarrhoea |
| 6. Breast milk | 6. Zidovudine |
| 7. Opportunistic infection | 7. Costly |
| 8. AZT | 8. ELISA |
| 9. Anaemia | 9. Pre-test and post-test |
| 10. Current treatments | 10. Confirm HIV infection |

Exercise # 3.3

Mark (✓) 'true' or 'false' or 'do not know' against each of the following statements.

		True	False	Do not know
1.	Every person involving in sexual activities has HIV.			
2.	By looking at a sick person we can know whether he/she is HIV infected.			
3.	The only way to confirm whether one has HIV is to go for an HIV/AIDS test.			
4.	A counsellor can tell you whether you have HIV/AIDS.			
5.	Pre-test counselling can help in healing AIDS disease.			
6.	A person who has HIV needs post-test counselling.			
7.	Western blot test is available only in western countries.			
8.	Ayurvedic treatment can cure a person from HIV/AIDS.			
9.	Pneumonia, fungal infection, tuberculosis and diarrhoea can cause HIV/AIDS.			
10.	ELISA test and Western Blot test can cure a person			
11.	Just after involving in a high risk behaviour, one can find out whether he/she is infected.			
12.	HIV positive result means you do not have HIV.			
13.	AZT can cause anaemia in an HIV/AIDS patient.			
14.	Regular blood transfusion can cure a person from HIV/AIDS.			
15.	An HIV infected person dies within one year of infection.			

Exercise # 3.4

Fill in the blanks

1. The only way to find out whether one is infected with HIV is to go for an
2. The ELISA test is significantly than the Western Blot.
3. The Western Blot Test is a test.
4. The ELISA test can indicate whether against HIV are present or not.
5. The Western Blot Test is a less test than the ELISA.
6. A negative Western Blot test rules out
7. So far the virus causing AIDS has not been detected in the of a person.
8. The current HIV treatments consists mainly of fighting symptoms of the infection.
9. Tuberculosis is an infection.
10. AZT causes in several patients.

Exercise # 3.5

Group activity

Objective

1. To help the students to identify and locate HIV Surveillance Centres and Zonal Blood Testing Centres in their States and Union Territories.

What to do

- A. The list of HIV Surveillance Centres and Zonal Blood Testing Centres are at appendix I and II respectively.
- B.
 1. Students are asked to draw a map of the State/Union Territory in which they reside.
 2. Then they are instructed to mark their district and block within the map.
 3. The students are then asked to mark the HIV Surveillance Centres located in their States/UTs.
 4. Finally they identify and mark the nearest HIV Surveillance Centre to their place of residence.
- C.
 1. Students are asked to draw a map of India.
 2. Then they are instructed to identify and mark the location of the Zonal Blood Testing Centres in various States/UTs.
 3. Finally they identify and mark the nearest Zonal Blood Testing Centre located nearer to their place of stay (home/hostel/boarding houses etc.)

HISTORY OF HIV/AIDS

In theory, it should be possible for us to find out when and where the first case of AIDS occurred. However, in practice this is not so simple. We know how HIV is transmitted, namely, (a) through sexual activities, from women to men, from men to women, between women and between men, (b) through infected blood, via blood transfusions, infected blood products and via the sharing of syringes and hypodermic needles, and (c) from an infected mother to her baby, before or during birth which is known as perinatal transmission. Therefore, it is usually possible to determine how each AIDS patient became infected.

Chronologically speaking, the origin of HIV may be traced from the 1950s. At the end of World War II, only a handful of viruses were known. Hundreds more have been discovered since, partly as a result of advanced techniques for culturing them in the laboratory. Viruses are parasites which infect almost every form of life, from single-celled bacteria to humans. HIV/AIDS appeared in the United States, Europe, Africa and Haiti almost during the same period. Because of this people are tempted to ask a question: whether HIV/AIDS was prevalent among some group of people for quite some time? After combing through records of past patients, medical researchers found a small number of probable cases of HIV/AIDS dating back over thirty years. There were similar cases from three continents.

The first case of HIV in India was reported in 1986. In USA, the virus was detected among some people as early as 1981. In 1979, a forty-four year old homosexual man died with Kaposi's Sarcoma in New York city. Kaposi's Sarcoma is a kind of cancer found very commonly among HIV/AIDS patients in the West. In 1977, a twenty-seven year old Rwandan lady developed the immunodeficiency symptoms and died. In the same year a thirty-four year old Zairean woman, who sought treatment in Belgium later died of opportunistic infection in Kinshasa in 1978. Similarly, a forty-seven year old Danish Surgeon, who had worked in rural Zaire, died in Denmark after developing similar symptoms. In 1975, a previously healthy seven month old black infant from New York had pneumocystis and succumbed to this illness. In 1969, a fifteen year old black US boy died with Kaposi's Sarcoma and opportunistic infections in St. Louis. Earlier in 1959, a British sailor with Kaposi's Sarcoma and pneumocystis died in Manchester.

To date, the earliest known blood sample, registering sero-positive by means of several different antibody tests was drawn in Kinshasa and Zaire in 1959. Efforts are still going on to trace the history of HIV/AIDS through investigations in a less scientific way, by retreating to the earliest North American cases. One unproved suggestion is that all US cases go back to a homosexual Air Canada steward who infected a large number of people across North America. Where this man caught the disease from is uncertain. There is therefore no reason to believe this assumption.

Theories about Origin of HIV/AIDS

To date, four theories have been propounded regarding the origin of HIV. The debate still goes on. Let us briefly discuss these theories in the following paragraphs.

- (a) The first theory: This theory states that HIV has been among mankind for a very long period. One possibility is that the virus came from a small isolated ethnic group, which had acquired an immunity to it. Therefore it rarely caused death among people in that community. When it spread outside that group, and reached people who lacked such an immunity, it became a killer disease. This theory is important for a key



reason. If this was the origin of the HIV, then the isolated group's immunity might enable a vaccine to be developed which may protect the rest of the world. There are few completely isolated peoples left in the world. Some of them are scattered in the rain forests of New Guinea, Amazonia, and perhaps Central Africa. In fact, we have in India the nearly extinct Great Andamanese tribe. According to the 1991 census, their total number is only about 35. Since one of the early locations of HIV/AIDS was Central Africa, lot of importance is attached to this possibility. By its nature, this is a theory which is very difficult to disprove. However, there are people who argue against it.

- (b) The second theory: According to this theory HIV has existed for a long time as an animal disease. Only recently it has managed to infect and trigger off an epidemic in humans. There are other examples of diseases "crossing over" from animals to mankind. Since a similar virus to HIV has been found in a species of monkey, this possibility has received considerable attention. But in 1988, the scientists who thought they had isolated a virus similar to HIV, from wild African green monkeys later announced they had committed an error.

History has recorded many great human diseases which have crossed over from animals or insects. It is a fact that domestic and wild animals can harbour germs. When these germs are contracted by humans, they can lead to an infection. Such infections can be passed on from person to person independent of the original animal source. Source books written

in the 1960s before HIV/AIDS was detected, listed eighty-four diseases which can be transmitted from animals to humans. Like the malaria parasite, in many cases, the human host is essential to the lifecycle of certain infective organisms. • HIV/AIDS is primarily a sexually transmitted disease. Therefore the theory that it originated among monkeys has given rise to the idea that the original transmission from monkey to human was via a sexual relationship. While medical researchers have not suggested this, the idea has been repeated in some literature. Many Africans have found this suggestion insulting and have reacted strongly against this whole simian origins theory.



A monkey origin for HIV/AIDS is often called the “simian theory”. Simian is a scientific term for apes and monkeys. Since the Western media dominate the international media, the African Scientific arguments against the simian theory have not received adequate publicity.

Human beings engaging in sexual relationship with animals is not a new phenomenon. People from several parts of India have spoken to me about the prevalence of this practice in India. Although this practice is not usually reported, it is believed that many people engage animals such as sheep, buffaloes, cows and dogs etc. for sexual activities. However, to my knowledge, no incidence of any disease crossing over from these animals have been reported so far except rabies.

- (c) The third theory: The third theory is about a man-made virus, perhaps developed from a germ warfare laboratory. This is not a scientific theory which is open to experimental confirmation. Rather, it has been propagated like a rumour campaign with different versions.

It may be stated that it is difficult to prove the germ warfare theory. The first argument against it is that genetic engineering was not sufficiently advanced to develop such a man made virus at the time HIV first appeared. The HIV/AIDS virus must have been in existence several years before 1980. If one accepts the evidence for HIV/AIDS cases as early as 1959, it must have been in existence since the mid-1950s. The science of genetic engineering was not sufficiently advanced even in the

late 1970s. Therefore, there was little chance for the development of an HIV like germ in a laboratory.

The second argument is that a virus like HIV is not the sort, a germ warfare laboratory would wish to develop. There is no point in developing a virus as a weapon unless one's own side can be protected against it. The ideal germ warfare organism would be one that caused disease very quickly on those deliberately infected with it. Further one would have ensured that there was a vaccine available to protect one's allies. HIV differs from this in every respect. Few Scientists, if any, seriously take the theory that HIV is the result of a scientific conspiracy. So far, there is no substantial evidence to prove this theory.

- (d) The fourth theory: The fourth theory is called the "Mutation theory". According to this theory, viruses are continually changing and 'mutating' into new strains. It is possible that a mutation took place in a virus which produced a new virus with the deadly properties of HIV. As reported earlier, the first recorded cases of the traces of HIV infection were from North America (1969), UK (1959), and Zaire (1959). However, it is possible that there were other cases of HIV/AIDS in other countries of which we have no knowledge. With increased migration, market economy, liberalization and expansion of global tourism industry, lot of travel has taken place among people within and outside the country since 1950s. This has increased interaction among people. Thus it is easy for a disease to cross over from one person/community to another

person/community. Therefore it is very difficult to ascertain the country that helped originate HIV.

History of HIV/AIDS in India

Although HIV was detected in the West in 1981, an AIDS Task Force was established in India only in 1985. This initiative was taken by the Indian Council of Medical Research (ICMR). Screening for HIV began in 1985 in Pune (Maharashtra) and Vellore (Tamilnadu). In 1986, the first HIV positive case was detected in Chennai. During the same year, the first AIDS case was also reported from Mumbai. It is believed that this patient got infected in USA. Since then large number of HIV/AIDS cases have been reported from all over the country. Every State and Union Territory in the country have reported detection of HIV or AIDS. In some States, the screening facilities are better and much advanced. In such States, one may find a large number of detected cases of HIV. For more information you may read table No.9.2 which presents the details available as on March 1998.

Exercise # 4.1

Answer the following questions in brief

1. How does HIV transmit from one person to another?
2. Write the chronology of HIV/AIDS from 1959 to 1986.
3. Do you agree with the statement: “HIV is an old human disease Explain.
4. Do you think that the HIV/AIDS disease has crossed over from an animal to the human being? Briefly describe your views.
5. Is it true that HIV is a man made (created) germ developed in a warfare laboratory? Discuss your views briefly.
6. What do you understand by “Mutation theory” in relation to HIV/AIDS?
7. Write a brief history of HIV/AIDS in Europe and America.
8. Write a brief history of AIDS in India.
9. What are the four theories about the origin of HIV/AIDS?

Exercise # 4.2

Fill in the blanks

1. The first AIDS cases were reported in in 1981.
2. The first HIV/AIDS cases were reported in India in
3. Kaposi's Sarcoma is a kind of found very common among HIV/AIDS patients.
4. The earliest known blood sample registering sero-positivity was found in and in 1959.
5. Domestic and wild animals can harbour
6. is primarily a sexually transmitted disease.
7. A monkey origin for HIV/AIDS is often called “.....” theory.
8. AIDS Task Force was established in India in
9. Screening for HIV began in India in
10. Viruses are which infect almost every form of life.

Exercise # 4.3

Match the Following

- | | |
|-----------------------|---------------------------------------|
| 1. HIV transmission | 1. Great Andamanese |
| 2. Air Canada Steward | 2. Germ warfare |
| 3. Tribe | 3. Tamilnadu |
| 4. Animals to humans | 4. Kaposi's Sarcoma |
| 5. Simian | 5. Sex, blood and mother to child |
| 6. Man made virus | 6. Rural Zaire |
| 7. ICMR | 7. Homosexual |
| 8. Vellore | 8. Apes |
| 9. Cancer | 9. Indian Council of Medical Research |
| 10. Danish Surgeon | 10. Eighty-four diseases |

Exercise # 4.4

Mark (✓) 'true', 'false' or 'do not know' against each of the following statements.

		True	False	Do not know
1.	We know when and where the first case of AIDS occurred.			
2.	The origin of HIV may be traced back to World War II.			
3.	Viruses are parasites causing HIV infection.			
4.	Kaposi's Sarcoma is and AIDS disease.			
5.	It is reported that HIV was prevalent from the beginning of mankind.			
6.	HIV was initially an animal disease.			
7.	HIV is reported to be a manmade virus.			
8.	AIDS Task Force was set up in India because HIV was detected in the West.			
9.	HIV is transmitted only through three ways.			
10.	Chronologically speaking, the origin of HIV may be traced back to India.			

Exercise # 4.5

Debate

Objectives

1. To enable the students to understand the issues surrounding the history and origin of HIV/AIDS in the right perspective.
2. To enable the students to reason out the need to concentrate on where AIDS is going rather than where it came from.
3. To discourage the students from blaming others and to take timely action to contain the virus.

What to do

1. Invite at least six volunteers.
2. Divide them into two groups of three each.
3. Additional members can be added to in equal number to both the groups.
4. Write down the topics on small chits and keep them in a box.
5. Ask each group to send their leader.
6. The teacher directs one of the group leaders to pick up a chit.

7. The topic is read out to the students.
8. One group will speak for the motion and one against it.
9. They may be given sufficient time to prepare. In some cases, a teacher may give them as many as five or seven days to prepare. This will enable them to do library work and discuss with other experts to collect sufficient materials.
10. The time duration can be 45 minutes to one or one and a half hours.

Topics

1. Let us concentrate on where HIV/AIDS is going and not from where HIV/AIDS came.
2. Market economy, liberalisation, migration, globalisation and tourism has paved way for the spread of AIDS in India
3. AIDS is a punishment given to man for abusing animals.
4. Man developed the AIDS virus to fight against his fellowman. Now the virus has proved to be dangerous to his own life.
5. AIDS disease is not a threat to the Indian population, because all the reports appearing in the media are baseless and have no foundation.

HIV TRANSMISSION

It is very important to know the routes of HIV transmission. This will help us to avoid the spread of HIV. In other words, understanding how HIV passes over from one person to another will enable us to protect ourselves. It will also help us to plan and implement programmes for the prevention and control of HIV/AIDS.

How HIV is Spread?

The HIV/AIDS virus can pass on to an individual through three routes. These are: (i) Sexual exposures (ii) Contact with HIV/AIDS contaminated blood and blood products, and (iii) mother to a child through pregnancy or childbirth.

Persons infected with the HIV virus can pass on virus to those who are not infected even though they may not show the symptoms of HIV infection. Because most people with HIV are currently not sick, most transmission occurs from those without symptoms. Therefore it is essential that everyone is enlightened about the transmission of HIV. It is also important to know who gets infected and how one gets infected.

HIV has been found in a number of body fluids and tissues such as in blood, saliva, tears and breast milk. HIV is present in all body fluids, tissues and

organs. However, HIV is not easily transmissible through normal day-to-day contact. This is because HIV is a delicate virus. It is easily killed by heat and by drying. Let us examine how HIV spreads among people through various routes.

Sexual Transmission

HIV transmission from men to women and from women to men is well known and well documented. The blood and semen of men who are infected contain HIV virus. During heterosexual genital intercourse, HIV enters a woman through the small breaks in the lining of the vagina. Unlike the penis, the vagina is known to have many potential entry sites. This is so because the vagina is exposed to a greater volume of infectious material than is the penis. In the case of men, genital ulcers serve the same function as breaks in the lining of the vagina. This provides the virus a direct passage to the bloodstream. It may be noted that there are several confirmed cases of HIV transmission through artificial insemination, with semen of men not officially known to be infected. Therefore, it has become necessary to screen sperm donors for HIV.

The AIDS virus is primarily transmitted through sexual contact. There are two key scientific factors which allow us to understand its spread: (i) an infected person transmits the virus to a partner during sexual activities and (ii) frequency with which a person acquires new sexual partners. HIV is present in seminal and vaginal fluids, cervical secretions, as well as in blood. Any exchange of fluids during intercourse or other sexual activities can result in

transmission of the virus. The transmission is possible through the porous membranes of the vagina, penis, mouth or anal canal into the blood streams. Studies of artificial insemination confirm the fact that seminal fluid transmit HIV/AIDS virus. There are reports showing that women have been infected by a single exposure to infected semen during artificial insemination.

It may be noted that a single sexual encounter with an infected partner is sufficient to transmit the HIV virus. Therefore having Sex with unknown persons, or a prostitute can prove to be a dangerous act. Similarly people involving in rape also can get infected if either of the persons is infected. Usually women appear to be more at risk than men from heterosexual sex. There are more chances for the virus to infect the women than men. One reason is that the infected semen/fluids/blood from the man remains in the woman's body for a longer period of time. This increases the chances of infection in women.

People who are suffering from any of the Sexually Transmitted Diseases (STD) can get infected faster than normal people. This is because a lot of sores or genital ulcers are usually found around their sexual organs (penis, walls of vagina etc.). They normally cause breaks in the skin. Through these breaks

HIV can enter into the blood streams of the person. It may be noted that a lot of pus gets formed on the sores of those suffering from STDs. The pus contains large quantities of white blood cells. The pus of an infected person is likely to have a high concentration of the HIV virus.



During the menstrual period, it is not safe to have sex with a woman, as it is a risky activity. If the woman is an HIV carrier, her menstrual blood will certainly have the HIV virus which can pass on to an uninfected partner. The

sanitary pads/tampons used by an HIV infected woman will also contain HIV virus. Therefore:

- i) It is a risky activity for men to have sex with unknown women. This is applicable for those seeking casual sex, paid sex, sex with mutual consent, sex with sex workers as well as rape.
- ii) Women involved in same sex relationship (lesbians), particularly mouth to genital contact are at a higher risk of getting infected with HIV.
- iii) Health care providers and relatives taking care of HIV infected women at home will have to be very careful in disposing off the sanitary pads/tampons.

People practice various types of sexual acts which are justified for one reason or the other. Oral sex, anal sex, homosexual sex, masturbation, sex involving animals or sex toys etc. are some such examples. There are also bisexual persons who involve in homosexual as well as heterosexual acts. Every form of these acts have some degree of risk. Some of these activities are high risk acts while others have limited risk of HIV transmission. The best option always is to stick to one's own spouse -- the only faithful and uninfected partner one can depend upon.

Anal sex is a high risk activity for the transmission of HIV. Since the inner lining of the anus is delicate, it is not fit for receiving a penis. Therefore, it can be easily torn during the process of an anal intercourse. It may be noted

that there are many white blood cells in the blood vessels located in and around the rectum. It will be easy for HIV to infect these cells. Anal sex is dangerous for both partners. Since the anus is not fit for receiving the penis, usually bleeding takes place during a forced penetration on the penis as well as the rectum.

Oral sex is also a high risk activity. The mouth usually has a lot of small pores, sores and sometimes ulcers. HIV/AIDS virus can easily pass through them to the blood stream. The very act of oral sex can lead to bleeding, when the teeth of the active partner come in contact with the sex organs of the passive partner as the genitals are soft. Therefore voluntary/forced/paid/oral sexual activities are high risk actions. Oral sex involving homosexuals/lesbians are also dangerous if one of the partner is HIV infected. Similarly having oral sex with a woman during her menstrual period is also a high risk activity. The menstrual blood has high concentration of HIV.

Transmission via Blood

Blood Banks and blood donation originated in India in 1941. During this period, the second World War was in full swing. It became a war necessity to supply blood to the wounded soldiers. In 1941, the then Governor General of India directed all Provincial Governors to set up blood banks. These blood banks were to supply blood to the needy soldiers and civilians during the war period.

Today there are over one thousand officially known blood banks in the country. There are also hundreds of unregistered or illegal blood banks spread across the country. They collect blood from professional blood donors. Professional blood donors are those who sell their blood for a price. They are usually very poor people who do not have any other means of survival and hence sell their blood frequently.

A person should be allowed to supply blood not more than once in three months. If one supplies blood more than once in three months, his/her blood will not be of good quality. But in India, the demand for blood far out weighs the supply which is very limited. Therefore blood donation has become a business for many.

Official sources say that the country require six million units of blood per annum. But the actual supply is less than two million units. This calculation is done based on the total number of hospital beds in the country. There are about six lakhs hospital beds in the country.

This calculation cannot be justified, because there are certain other facts to be taken into consideration: (i) Most of the hospitals are located in urban centers. They mostly meet the needs of people in the cities. In India, about 75 percent of people live in rural areas. Only 25 percent live in urban areas. (ii) It is estimated that about 80 percent of women in India are anaemic. They require blood transfusions particularly when they become pregnant. (iii) There are thousands of thalassaemia patients who require blood transfusion. To meet all these

requirements, a large quantity of blood is collected which is not accounted for. Most of this blood comes from professional blood donors and illegal blood banks. Further, hardly any screening or testing is done on



this blood to ascertain whether the blood is free from any type of virus or germs. Therefore, there are strong chances of collecting and transmitting contaminated blood. In fact all the reports providing details about HIV

infection in India reveal that several people have got infected through contaminated blood.

Testing of blood for HIV has been made mandatory in most of the developed countries. In Europe, North America, Australia, one can go for blood transfusions without the fear of getting infected with HIV. In these countries, every unit of blood is tested for HIV. But in India and many other developing nations, the testing facilities are not adequate. There is also dearth of trained personnel in blood banks. Therefore, one should make sure that every unit of blood is screened for HIV before transfusion.

Another important information is that it takes 6 to 12 weeks after infection for the body to produce antibodies. Therefore, if blood is donated during the 'window' period, antibodies for HIV will not be detected. But such blood can still be infectious. In India a number of professional blood donors have been found to be HIV infected. Therefore, accepting blood from a professional blood donor has to be discouraged. Instead, every institution and agency in the country should promote voluntary blood donation to meet the blood requirement in the country. However, one should ensure that fresh needles should be used each time to collect blood from a person.

Thalassaemia patients and Hemophiliacs in the country are at a greater risk of getting infected with contaminated blood. Thalassaemia patients require regular transfusion of blood. Similarly, haemophiliacs require regular supply of a substance called Factor VIII. Factor VIII is made from blood. Extra

care should be taken so that these patients are not HIV infected in the process of giving them treatment.

Some other practices involving high risk for contracting HIV/AIDS virus through blood are:

- i) There are a large number of intravenous drug users who inject drugs into their blood stream. Most of these people share the same needle among themselves for injecting drugs. Hundreds of youth from Manipur and other Northeastern States are infected with HIV through the use of contaminated needles. People from other States in the country also face a similar threat.
- ii) Health care providers often get needle pricks and injury caused by other equipments used for surgery. There are several documented cases in India where health care providers were infected with HIV.
- iii) Every person requiring a needle prick for a blood test or for taking an injection from a hospital or health clinic should ensure that the needle used is a fresh one.
- iv) Tattooing, ear piercing, nose piercing etc. should be done with clean and HIV free instruments.
- v) Practice of group circumcision for boys as well as girls (although very rare in India) needs to be done with extra care. Help of a physician and

use of clean instruments will eliminate chances of complication as well as getting infected with HIV.

- vi) While visiting a barber, one should either carry a fresh blade or request the barber to use a clean and fresh blade for shaving.
- vii) While considering organ transplantation, one should ensure that he/she is given organ/tissue from an uninfected person.

Mother to Child Transmission

It is possible for a baby to get infected: (i) before the birth of the infant, and (ii) during childbirth. HIV can cross the placenta from the mother to the infant before birth. Similarly, HIV is also transmitted from the mother to the child during birth when the infant travels down the birth canal. It is estimated that about 30 per cent of children born to HIV positive mothers get infected with HIV.

However, it is a fact that all babies will carry antibodies of the mother when born. These antibodies will be present in the child for about 6 to 18 months. Therefore, it is normally very difficult to detect whether a child is HIV infected or not by conducting an ELISA test during the first 18 months of its life.

However, infants born to HIV positive mothers can receive a diagnosis of “Indeterminate HIV”. In order to make an immediate assessment of new born babies, the latest detection procedure such as PCR (Polymerase Chain

Reaction) that test for HIV DNA in infected cells can be used. These are very rarely available. They are also very costly. Therefore, ordinary people in India cannot afford it.

HIV also has been found in breast milk of the infected mother. Therefore an HIV infected mother can pass on the virus to a child through feeding of breast milk. It may be noted that the breast milk collected from milk banks located in some of the hospitals in India may not be safe to feed infants.

Saliva also can carry HIV from an infected person to another. Therefore one should be careful in sharing saliva through deep kissing.

Similarly, first-aid-workers must be careful in giving mouth-to-mouth resuscitation to people with HIV. Although the risk in such an act is limited, presence of blood in the injured person's mouth can be risky.

Health care providers and those who help the HIV infected in cleaning their vomit, faeces, urine and sanitary pads/tampons should be extremely careful in their work. Sufficient precaution should be taken by using double gloves while indulging in such cleaning activities. These precautionary measures should also be followed by family members of HIV/AIDS patients.

Exercise # 5.1

Match the following

- | | |
|--|---|
| 1. HIV is | 1. Sexually transmitted disease |
| 2. HIV can pass onto an individual through | 2. High risk activity |
| 3. AIDS virus is primarily transmitted through | 3. About 6 lakhs |
| 4. HIV is not easily transmitted through | 4. Six million units of blood per annum |
| 5. STD stands for | 5. Sexual exposures |
| 6. Anal sex is a | 6. Once in 3 months |
| 7. Hospital beds in India | 7. High concentration of HIV |
| 8. Country requires | 8. Normal day-to-day contact |
| 9. It is alright for a person to supply blood | 9. Easily killed by heat and by drying |
| 10. Menstrual blood has | 10. Sexual contact |
| 11. Resuscitation | 11. Haemophiliacs |
| 12. Circumcision | 12. Skin piercing activity |
| 13. Factor VIII | 13. Blood transfusion |
| 14. Tattooing | 14. Cutting a part of the genital |
| 15. Thalassaemia patients | 15. Mouth to mouth contact |

Exercise # 5.2

Fill in the blanks

1. HIV has been found in a number of body fluids and
2. There are several confirmed cases of HIV transmission through with semen of men not officially known to be infected.
3. People who are suffering from any of the can get infected with HIV faster than normal people.
4. The only faithful and uninfected partner one can depend upon is one's own
5. is a high risk activity.
6. Blood banks and blood donation originated in India in the year
7. Today there are over officially known blood banks in the country.
8. About per cent women in India are anaemic
9. Infants born to HIV positive mothers can receive a diagnosis of HIV
10. PCR stands for

Exercise # 5.3

Answer the following questions in brief

1. What are the three routes by which AIDS virus can pass on to an individual?
2. Why it is essential to know how HIV get transmitted?
3. Why it has become necessary for screening sperm donors for HIV?
4. Why sex with an unknown person is dangerous?
5. The chances of infection in women are more than that of men. Why?
6. People who are suffering from any of the STDs can get infected with HIV faster than normal people. Why?
7. During menstrual period, it is not safe to have sex with a woman. Why?
8. Anal sex is a high risk activity. Explain.
9. Write a brief history about the origin of blood banks in India.
10. Who are the professional blood donors?
11. In India several persons got infected through contaminated blood. Justify this statement.
12. List out the practices involving high risk for contracting HIV/AIDS virus through blood and blood products.
13. Describe briefly how HIV/AIDS is transmitted from a mother to her child.
14. One should be careful in sharing saliva through deep kissing. Why?

Exercise # 5.4

Mark (✓) 'true', 'false' or 'do not know' against each of the following statements.

		True	False	Do not know
1.	Most of the HIV transmission from one person to another occurs from people who are not HIV positive.			
2.	HIV has been found in sweat.			
3.	HIV is present in an infected persons body fluids and tissues.			
4.	Because HIV is a delicate virus, it cannot pass on to normal people.			
5.	Hetrosexual genital intercourse involving husband and wife can transmit HIV/AIDS virus.			
6.	Through heterosexual activities only women can get infected.			
7.	A man cannot get HIV from a Woman			
8.	An HIV infected child can pass on the Virus to its mother			
9.	HIV transmission can take place only through sex with a prostitute.			
10.	By raping a woman, a man can get infected with HIV.			
11.	Sex with an unknown person is a high risk activity.			
12.	Blood donation is not safe in India.			
13.	Blood transfusion from Government hospitals in India is safe.			
14.	People suffering from STDs will get HIV infected.			
15.	Doctors and nurses cannot get HIV infected.			

16.	It is safe to have anal sex with an HIV infected woman.			
17.	Oral sex involving an HIV infected person is not a high risk activity.			
18.	Unmarried people cannot get infected with HIV.			
19.	It is safe for a voluntary blood donor to donate blood once in a month.			
20.	Blood donated during 'window period' is safe from HIV.			
21.	All the Thalassaemia and Haemophiliac patients in India are infected with HIV.			
22.	Injecting drugs with a needle is a safe activity.			
23.	Injection from a hospital in India is safe.			
24.	Ear and nose piercing in India is a safe activity.			
25.	A barbershop in India is a safe place.			
26.	Mothers from good families cannot transmit HIV to their children.			
27.	Mouth to mouth resucitation is a safe activity.			
28.	Saliva of an HIV infected child will not have HIV.			
29.	All children born to HIV positive mothers will have HIV antibodies.			
30.	Kidney transplantation and eye donation in India can be high risk activities.			

Exercise # 5.5

Role play

Objectives

1. To help the students understand how peer-group pressure can lead to making wrong decision and get into problem.
2. To enable the students to understand how difficult it is to say 'no' to peer-group pressure.
3. To enable the students to understand how one can say 'no' to peer pressure and do something positive about it by forming alternate peer-group.

What to do

1. The teacher calls for few volunteers. The number will depend on the strength of the class or group.
2. The teacher will explain to the group about the purpose of the role play and how to learn to make decision through participatory process.
3. The teacher will then explain the situation:

a) One scene can be a meeting of a 'peer-group' consisting of all volunteers.

b) The group leader makes a suggestion to go for a picnic to the city (any spot of interest).

c) Everyone agrees.

4. The second scene can be the picnic spot:

a) Some are playing cards; sitting around and playing riddles; having small sing song or cracking jokes etc.

b) A couple of students lands up with some food items along with some cigarettes and liquor bottles (The bottles and cigarettes are not original but imitations only).

c) All are asked to sit around for the meals.

5. The third scene shows various reactions of the students:

a) Some students are thrilled at having a smoke. Some students refuse to share the cigarettes. Some others refuse to join the group.

b) Some students prefer drink along with cigarettes.

6. The fourth scene can be:

a) Some students form a group of non-smokers and non-drinkers. They sit around and enjoy the food along with some light conversation and enjoying themselves.

7. The fifth scene can be:

a) Some of those who took drinks start vomitting; some fall back and sleep; some start disturbing others due to intoxication.

b) The non-smokers non-drinkers help them to bring the situation under control.

8. At the end, the teacher will guide the students to analyse various scenes. Care will be taken to bring out:

a) The peer pressure tactics

b) Positive and negative aspects involved in the 'peer groups' - both smokers and drinkers and non-smokers and non-drinkers.

c) The bad consequences of peer pressure and its implications.

d) The moral lessons to be learned.

e) The advantages of forming alternate peer-group.

HOW IS HIV NOT SPREAD ?

In India, there are widespread misconceptions among people from all walks of life about HIV transmission. People are routinely been thrown out of hospitals and health clinics, if found to be HIV infected. Schools refuse admission to children merely based on rumour that the child's family members have HIV. Police teams are sent to arrest people based on false information gathered from hospitals about HIV status of certain persons. Employers have fired employees known to be carrying the virus. Hotels have refused rooms to people hailing from certain localities known to be having high concentration of HIV persons. Village communities have ostracized persons alleged to be carrying HIV. Several infected have been thrown into enclosures along with rabies patients to face inhuman death. HIV infected persons have been refused entry into places of worship. Incidents of torture and murder of HIV infected in public places and villages have been reported by media from across the country. The public has attacked ambulance carrying AIDS patients and their dead bodies. People have refused to dig grave to bury the HIV infected dead. These are some of the facts being repeatedly reported by the Indian media.

The time has come for people in India to change their attitude to the HIV infected. Every effort needs to be made to remove the social stigma attached to the AIDS disease. There is also unfounded fear among people about

getting infected due to ignorance. All these fears and misconceptions are due to lack of proper awareness among the masses. Unfortunately, some of the earlier awareness campaigns focussed on instilling fear among people. Those involved in such campaigns thought that fear may help people bring about changes in their behaviour pattern.

Although HIV has been detected in all the human tissues, organs and fluids, the virus spreads from one person to another only through specific routes. These three routes were discussed earlier, namely, through blood and blood products, perinatal contact between mother and child and sexual exposure. Through everyday social contact one has hardly any chance of getting infected with HIV. The health care providers and family members who take care of the HIV infected, should take adequate precaution while coming into contact with body fluids of the patient.

Many people fear that HIV can be transmitted through mosquitoes, bed bugs and pets. This is a fallacy. The virus in the blood that the mosquito sucks in is too little and cannot cause reinfection. In the case of malaria, there is replication of the parasite within the mosquito. This increases the infection dose. But HIV is not able to replicate in mosquitoes. Another argument is that if insects were to spread HIV, by now the entire human race could get infected with the virus.

It may be noted that an increasing number of laboratory tests have been conducted to study the extent of chances for the mosquitoes to spread HIV.

Scientists have fed bed bugs and mosquitoes with HIV contaminated blood in a laboratory setting. After one hour, they isolated genetic materials from these insects. They subsequently found that the virus did not grow in the insects' cell.

Coughing and Sneezing

As stated earlier, AIDS is a communicable disease, but it is very hard to acquire. The AIDS virus is very delicate and fragile. It cannot survive in the air. Therefore coughing or sneezing cannot spread HIV/AIDS virus. One cannot get AIDS by visiting an AIDS patient in a hospital. You also cannot get HIV by sharing a room with someone who has AIDS.

Workplace, School, Place of Worship

Case records and reports of study conducted in various parts of the country on HIV in workplace is now available. All these documents show that many employed people get infected with HIV/AIDS. We also often hear that HIV infected are thrown out of job. With the market economy and liberalisation, large number of business and sales executives and often officials keep travelling. Many of them visit sex workers and comfort women. Thus they put themselves into dangerous situation of getting infecting with HIV.

Working along with the HIV infected will not spread the disease. Similarly sitting along with HIV infected friends in a classroom also will not spread AIDS. You should feel happy to go to a place of worship (church, temple,

mosque, gurudwara etc.) along with an HIV infected. Casual Social contact in no way can lead to the spread of HIV. Instead, one should feel happy to interact with an HIV infected in a workplace, school or a place of worship. The HIV infected need love, warmth and understanding from us. Their days are counted. Let us try to make them happy for the remaining period of their life.

Casual Contact

Through casual contact one cannot get infected with HIV. Casual contact means day to day interaction. These interactions take place at home, neighbourhood, market, bus, school or office, places of worship, official meetings, parties, clubs, cinema hall, playground etc. Casual contact may include shaking hands, hugging, patting on the shoulder, dry kiss, saying hello or goodbye, giving a helping hand to one to climb a vehicle or a stair case etc. Through these contacts, one will not get infected with HIV from an infected person.

Sharing of Common Articles

You cannot get the AIDS virus by sharing cups, spoons, plates and drinking glasses. Using a telephone someone with HIV has previously used and sharing a towel with an HIV infected person also cannot transmit the AIDS virus. Similarly eating food prepared by an infected person is not risky as no exchange of blood or sexual fluids into the blood stream of another person takes place.

Let us now examine some of the low risk and high risk activities in relation to HIV/AIDS. We shall also examine some of the safe practices through which one cannot get infected with HIV/AIDS virus.

Low Risk Activities

1. **Using another person's toothbrush:** You should ensure that you don't share the toothbrush of any other person. In an unavoidable situation, ensure that a toothbrush used by an HIV infected does not have any blood on it. If there is blood, and if you have ulcers or a bleeding gum etc. you can get infected. But it is highly unlikely.
2. **Using another person's razor:** You should avoid using a blade or a razor used by someone else. When you visit a barber, ensure that you carry a fresh blade or ask the barber to use a fresh blade. A blade or a razor used by an HIV infected person which has blood on it can be risky. The chances of getting infected is very low. However, one cannot rule out the possibilities.
3. **Having ears or nose pierced or being tattooed:** There is a risk of HIV transmission if you share needles and skin piercing instruments used by an infected person. It is always safe to approach a professional person who can do the work for you using fresh or sterilised instruments. The risk involved is very low. But you have to be careful when such activities are done on a group of clients.

4. **Mouth-to-mouth resuscitation:** Resuscitation is a process of helping a patient to revive from unconsciousness or apparent death. Sometimes a person rescued from getting drowned may require resuscitation. So far, no one has ever been known to get HIV from mouth-to-mouth resuscitation. It is a low risk activity. If there are open cuts or bleeding from or around the mouth of those involved, then there is a chance of infection with HIV through blood/saliva.

5. **Caring and cleaning an HIV infected:** Knowing about the possibility of getting infected while caring for an AIDS patient is very important. If you are careful about the precautionary measures, you will not get infected.



Infection can occur only if the patient's blood or other body fluids enter your blood stream through an open cut or wound. You should ensure that you wear double gloves while helping the patient who has a bleeding nose or wound. Similarly, care has to be taken while cleaning up faeces, urine and vomit. Generally speaking, these are low risk activities.

High Risk Activities

High risk activities involve direct contact with blood and other body fluids of an HIV/AIDS patient. If care is not taken to avoid the transmission of the HIV/AIDS virus, such actions will become high risk activities. In such cases, it is essential that one goes for an HIV test. However, one will have to wait for about 6 weeks to 6 months to get tested in order to get an accurate test result. Some of the commonly known high risk activities are given below:

- i) Sharing needles by drug users for injecting drugs is a very high risk activity. Blood from one infected person has a direct route into the blood stream of another person.
- ii) Using a needle for injection in a hospital or a health clinic which has been already used for injecting an infected person is a high risk activity. Disposable needles from an approved and well known company must be used for any type of injection. People in remote villages where disposal needles are not available, should ensure that a needle is sterilised in boiling water for about twenty minutes.

- iii) Getting a needle prick or getting hurt in a health clinic while attending on an HIV infected is a high risk activity in India. There are several known cases in India where nurses and doctors have been infected with HIV through needle pricks. Even in the best of hospitals, protective materials and disposable are hardly available.
- iv) Blood transfusion in India is a very high risk activity. People have got infected even from the blood supplied from the Red Cross Society of India.
- v) Any kind of organ transplantation in India is a high risk activity. Proper testing kits are hardly available in most of the hospitals in India. Lack of adequate number of trained health care providers to deal with HIV/AIDS is a major problem in India.
- vi) Feeding infants with donated human milk is a high risk activity.
- vii) Donor insemination is a high risk activity in India.
- viii) Wanting to have a baby by an infected mother or an infected father is not a right decision.
- ix) Indulging in sexual activities where contact with sexual fluids occurs is a very high risk activity. This is applicable for all people -- men and women, children, adolescents, homosexuals, lesbians, bisexuals,

heterosexuals and eunuchs. Some of the high risk sexual activities include: having penetrative vaginal sex; oral sex, anal sex, sex involving eunuchs, homosexual sex, lesbian sex, incest, any sex outside marriage, sex with a substance abuser, bisexual activities and casual sex within and outside the country.

Almost all HIV/AIDS and family planning (family welfare) campaigns propagate the use of various methods like use of condoms, contraceptives, diaphragm, mutual masturbation, talking and reading about sex and fantasy, watching sexy films etc. These activities do not provide any sort of permanent safety measures to protect oneself. They have very serious implications on an individual's dignity, personality, relationship with the spouse and opposite sex, and on one's health. Apart from creating "guilt feeling", such precautionary measures not only go against nature (and naturalness) but also violate teachings of some of the major world religions.

The most reliable, safe and dignified sexual activities are the ones which you may like to have with your spouse. Any kind of sex before marriage and sex outside marriage can be costly and may cause irreparable damages.

No Risk Activities

- i) Having sex with your uninfected and faithful spouse.
- ii) Sharing of spoons, drinking glass, plates etc.

- iii) Swimming in a public pool and using a public toilet.
- iv) Sharing a room with an infected person.
- v) Using a towel or a telephone used by an HIV infected.
- vi) Being bitten by mosquitoes, insects like bedbugs, headlice etc.
- vii) Playing outdoor or indoor games with HIV infected.



- vii) Working with an HIV infected in the office.

- ix) Sitting in the classroom and place of worship along with an HIV infected.
- x) Taking care of an HIV infected.
- xi) Eating food prepared by an HIV infected.
- xii) Sharing pen, pencil, books etc. used by an HIV infected.
- xiii) Being spat on or sneezed over by a person with AIDS.
- xiv) Kissing, hugging, shaking hands or travelling along with an HIV infected person.



Through everyday social contact, one cannot get infected with HIV. As mentioned earlier, although HIV/AIDS is a communicable disease, it can pass on from one infected to another only through certain well-defined routes.

Exercise # 6.1

Answer the following questions in brief

1. HIV infected are very often discriminated against in India. Briefly explain this Statement.
2. Which are the three specific routes through which HIV can spread from one person to another?
3. Why do we say mosquitoes and bed bugs do not transmit HIV?
4. Explain why coughing and sneezing cannot spread HIV?
5. Do you think that one can get infected with HIV through casual contact?
6. Describe briefly some of the low risk activities in relation to the spread of HIV/AIDS.
7. Why using a toothbrush of another person is considered to be a low risk activity?
8. What is the relevance of disposable needles in the context of the spread of HIV/AIDS?
9. List out any ten 'no-risk' activities in relation to transmission of HIV/AIDS.
10. Sex with one's spouse is a safe sex activity. Substantiate this statement.

Exercise # 6.2

Match the following

- | | |
|--|---------------------------|
| 1. HIV cannot be transmitted by | 1. Health Care workers |
| 2. AIDS | 2. Low risk activity |
| 3. Coughing and sneezing | 3. Red Cross Society |
| 4. Using another persons' razor | 4. No risk activity |
| 5. Any kind of organ transplantation | 5. Day to day interaction |
| 6. Blood supply | 6. Resuscitation |
| 7. Sitting in the classroom along with an HIV infected | 7. Milk bank |
| 8. Casual contact | 8. Cannot spread AIDS |
| 9. Helping a person to revive from unconsciousness | 9. Communicable disease |
| 10. Sex workers and comfort women | 10. Cannot spread AIDS |
| 11. Needle prick | 11. High risk activity |
| 12. Infants | 12. Mosquitoes |

Exercise # 6.3

Fill in the Blanks

1. High risk activities involve contact with blood and other body fluids of an AIDS patient.
2. Blood transfusion in India is a activity
3. Sharing of spoons with an infected person is a activity.
4. Having ears or nose pierced is a activity.
5. There is no report so far of any person getting infected with HIV from mouth to mouth
6. HIV cannot in mosquitoes.
7. Health care providers should wear gloves while cleaning an AIDS patient.
8. Most of the popular Family planning methods violate teachings of major world
9. Any kind of sex before and sex outside can be costly.
10. Donor insemination is a activity.

Exercise # 6.4

Mark (✓) 'true', 'false' 'do not know' against each of the following Statements.

		True	False	Do not know
1.	HIV/AIDS patients get good care and treatment in Indian hospitals.			
2.	HIV infected child can pass on the virus to his/her classmate.			
3.	There are no misconceptions about HIV/AIDS among people in India.			
4.	AIDS awareness has created fear among the Indian people.			
5.	The HIV infected does not deserve love and understanding.			
6.	In India we don't have injecting drug users.			
7.	Disposal needle are safer than unsterilised needles.			
8.	It is alright for an infected lady to have a baby.			
9.	Family planning methods can prevent and control HIV/AIDS.			
10.	Eating food prepared by an HIV infected can be dangerous.			

Exercise # 6.5

Brainstorming Session

Objectives

1. To enable the students to clarify misconceptions and fears associated with the spread of HIV.
2. To help the students to understand 'no risk', 'low risk' and 'high risk' activities in the context of HIV/AIDS.

What to do

1. The teacher will draw two vertical lines on the blackboard making three equal columns.
2. The teacher will assign each column to each of the three types of activities, i.e. (i) No risk, (ii) Low risk, and (iii) High risk.
3. The students are asked one by one from the first person sitting on the front row to the last person sitting on the last row to speak out one low risk activity.
4. The teacher will keep writing all the activities named by the students.

5. Even if a student makes a mistake, the teacher will keep writing the answers on the blackboard. (Sometimes a student may tell 'low-risk' or 'high'risk' activity when the discussion is on 'no-risk' activity).
6. After one round has been completed, the teacher can ask the students to speak out at random if there are any more activities they want to list.
7. Remember to get the participation of every student. However, a student should not be given more than 30 seconds to think and answer. After the expiry of 30 seconds, the next student should be asked to respond.
8. After completing the rounds for the 'no-risk' activity, the teacher will take up the second and third type of activities, namely, 'low-risk' and 'high-risk' activities respectively in the same fashion.
9. After all the rounds are over, the teacher will guide the students to analyse their responses on the blackboard and correct the mistakes.
10. Time duration will depend upon the number of students in a class.

BASIC INFORMATION ON SEXUALLY TRANSMITTED DISEASES (STDs)

Sexually Transmitted Diseases are commonly known as STDs. These are certain type of diseases that are usually spread through sexual activities. In earlier days, STDs were popularly known as “Venereal diseases”. They are communicable diseases which are relatively easy to contract. STDs are very serious and painful. Some of the STDs can cause death to the infected like the AIDS diseases. In fact HIV/AIDS is the latest addition to the list of STDs. Over twenty types of STDs have now been identified. A person gets infected with STDs by having either vaginal, oral or anal sex with an infected person. The vagina, penis, rectum, and mouth are the sources through which the STD germs can invade the body.

STDs have been in existence for centuries though concern about STDs grew only during the beginning of this century. During the first decade of the 20th century, Syphilis killed thousands of people. Syphilis is an STD which kept spreading like HIV/AIDS during those days. Initially physicians did not know how to tackle this dreaded disease. It is transmitted almost always by sexual contact. It can be cured and checked in time through proper treatment.

India is a vast playground for the rapid spread of STDs. Every year millions of Indians are being smitten with STDs. **There is no Vaccination against**

STDs. Therefore it can occur repeatedly as the human body cannot build immunity.

The serious consequences of these STDs include: blindness, sterility and in many cases death. The main cause of the spread of STDs is ignorance. Since people are not aware of the symptoms of these diseases, they keep infecting others. In fact many symptoms of STDs are not easily detected. Therefore, the disease spreads to other parts of the body. With a large number of people indulging in sexual activities outside marriage, India has become a fertile ground for the rapid spread of HIV/AIDS/STDs.

STDs and HIV/AIDS

STDs and HIV/AIDS are very much related to each other. As stated earlier, HIV infection is the latest type of STD infecting humans.

- i) Both HIV and STD infection are associated with the same risk behaviours. Therefore sexual activities with an HIV or STD infected person can transmit the disease. The preventive measures for STD can prevent HIV infection as well.
- ii) The presence of STD in a person facilitates the easy transmission of HIV infection. HIV transmission is very high in persons who have diseases that cause genital ulcers such as syphilis, chancroid and herpes. Early diagnosis and treatment of STDs can drastically reduce the chances of HIV infection.

- iii) STDs are also transmitted through the same routes by which HIV transmission takes place. Although most transmission occurs through sexual activities, one can also get infected through blood transfusion, tissue or organ transplantation and from an infected mother to the child.
- iv) HIV and STDs are now common in rural as well as the urban population in India. Both HIV and STDs can be prevented through certain behaviour changes. To be very specific one should avoid all forms of sexual activities outside marriage. One should also abstain from all kinds of drugs.

With the unabated spread of HIV/AIDS across the country, it has become an important task to explore strategies for the prevention and control of STDs. Given the cultural and social background of our people, there is a need to go beyond the traditional form of interaction. We need to follow culturally acceptable and personally beneficial strategies for the prevention and control of these diseases.

People at Risk of STDs

STDs affect men and women of all social, religious, professional, educational and cultural backgrounds and economic levels. They are most prevalent among prostitutes and those involved in extramarital sexual activities. Most of the studies conducted on prostitutes from various parts of the country reveal that over 90 per cent of the prostitutes are suffering from one or another STD. In fact, many prostitutes are suffering from HIV/AIDS. Some

of the reports allege that over 25 per cent of those attending STD clinics in Bombay are found to be HIV infected.

Women are the most vulnerable group to get infected with HIV and STDs. The main reason is their ignorance. Another reason why STD keeps spreading among women is the fact that they fear to visit the STD clinics for treatment, due to social stigmatization. The main source of infection are their husbands who tend to have casual sex. These women in turn infect their children and other family members due to ignorance and unclean practices.

Although anyone can get an STD, certain groups of individuals are more likely to get infected. Some of these groups include:

- * People who travel and seek sex for relaxation
- * Truck drivers who seek sex on their way
- * Prostitutes and call girls
- * Devadasis (girl children offered to temples)
- * Homosexuals and their partners
- * Lesbians and their partners
- * Bisexuals and their partners
- * Eunuchs and their sexual partners

- * Adolescents and street children who involve in sexual activities
- * Drug users who involve in sexual activities and their partners
- * People who involve in wife swapping
- * Migrant Workers who seek sex while away from families
- * Prison inmates who involve in same sex relations
- * Personnel in armed forces who involve in same sex relationships, etc.

Social Change and STD

It is a fact that from mid 1980s, our young people are increasingly being exposed to the world through the expansion of electronic media. There is certainly an ever growing increase in sexual activities in schools and educational institutions. Nearly 40 per cent of our population constitute the youth, who continue to be ignorant about the facts of life. They do involve in experimenting sex to a certain extent.

Doctors recommend periodic testing for people who involve in sexual activities outside marriage. This is because many STDs initially show no symptoms, particularly in women. And when certain symptoms of STD develop, they may be confused with those of other diseases which are not transmitted through sexual contact. You may note that even if an STD may not show symptoms, an infected person can pass it on to another.

Women and STDs

Some of the STDs such as chancroid, syphilis and genital herpes are collectively known as genital ulcer disease (GUD). A woman is more likely to be infected by an HIV positive man who has GUD than one without it. Similarly, a woman who has GUD is more likely to pass on the infection to her sexual partner(s).



STD related health problems tend to be more severe and more frequent in women than in men. This is because, women do not seek care and treatment until serious problems have developed. A discharge or a sore is more likely to be noticed in men than women. In women internal sores or inflammation often pass undetected. The inflammation alone can increase the risk of HIV transmission. In women, many types of STDs are found relatively free of symptoms. Therefore, one has to be extremely careful in seeking medical care for any sort of genital problem.

STDs in women may also be associated with cervical cancer. One of the STDs, namely, Human Papillomavirus Infection (HPV), can cause genital warts. It may also lead to cervical and other genital cancers. Pregnant women suffering from any of the STDs should be extremely careful. They should seek guidance from health care providers or counsellors. It is a fact that STDs including HIV can be passed from a mother to her baby before or during childbirth.

Treatment Options

Most of the STDs can be treated effectively provided they are diagnosed well in time. However, the latest STD, namely, AIDS has no cure so far. If infected, death is certain as on date. In fact the World Health Organisation (WHO) has ranked STDs among world's most pressing health problems.

Health care providers, social workers, Psychiatrists and Counsellors to whom STD patients come or are referred may do well if they can inform clients about the following points:

- * For complete cure of any STD, the patient will have to take a whole course. Usually within a couple of doses or days of medication, one may feel that one has improved. Incomplete treatment might lead to chronic infection. Therefore, a patient under treatment must complete the course.
- * The patient must be motivated to inform their partner(s) about their health status. Partners of STD patients should also undergo tests of STD and seek appropriate treatment well in time.
- * A patient must be advised to remain in monogamous relationship with one's spouse. The other choice is to practice abstinence if one is single.
- * A patient under treatment must be urged to return to the Doctor until one is declared fully cured by the physician. Disappearance of symptoms alone is not enough. Only a Doctor can say whether one is fully cured.

Proper Attitude

Health care providers including counsellors and family members should adopt a sympathetic and non-judgemental attitude towards STD/HIV patients. A condemning attitude can be counter-productive. Privacy and confidentiality are essential for the patient. An atmosphere of professionalism is required where HIV/STD patients are treated. These aspects will help in a major way to prevent and control the further spread of the diseases.

Common STDs

Very often people tend to become embarrassed when seeking information on STDs. Most STDs are readily treated. All physicians have information about STDs. Therefore your family doctor or a Doctor nearer to your home will be in a position to help you with required information and treatment. Some of the common STDs are:

1) Syphilis

Syphilis is one of the most dangerous STDs. It is transmitted almost always by sexual contact. A pregnant woman with Syphilis can pass the bacterium to her unborn child. The child may be born with serious mental and physical problems as a result of the infection.



2) Gonorrhea

Gonorrhea is probably one of the most commonly reported STDs. This is transmitted during genital contact. It can also be passed from genitals of one partner to the throat of the other during oral sex. Gonorrhea of the rectum can occur in people who practice anal intercourse. It also occurs in women due to spread of infection from the vaginal area. During delivery gonorrhea can be passed from an infected mother to her newborn infant. Due to sexual abuse of children, Gonorrhea spreads in children. It may be noted that it is not necessary that symptoms should occur in all cases of gonorrhea infection.

3) Genital Herpes

Genital herpes is a painful STD which has no known cure as it. It is a contagious viral infection and affects millions each year. It is transmitted usually by vaginal, oral and anal sex. Genital herpes in pregnant women can pass the virus to the foetus. Pregnant women should seek a cesarean if they suffered from genital herpes.

4) Chlamydial Infection

Chlamydial infection infect both men and women. It can cause infertility in women. The infection occurs during vaginal, and oral sex. A pregnant woman may pass the infection to her infant during delivery. This may result in eye damage and infant pneumonia.

5) Bacterial Vaginosis

Bacterial Vaginosis infect women of childbearing age. This disease can be transmitted through sexual activities. Due to the change in the balance among different types of bacteria in the vagina, bacterial vaginosis may develop.

6) Trichomoniasis

Trichomoniasis is an STD that often develops without any symptom. It affects both men and women. In women, some of the symptoms that can be noticed include a heavy, yellow-green or gray vaginal discharge, discomfort during intercourse, vaginal odor and painful urination. In men, the symptoms include a thin, whitish discharge from the penis and painful urination.

7) Vulvovaginal Candidiasis (VVC)

VVC is a common cause for vaginal irritation. Some of the factors contributing to VVC are: pregnancy, use of oral contraceptives, use of perfumed feminine hygiene sprays, use of poorly ventilated clothing and undergarments. One has to keep oneself neat and clean to avoid this disease.

8) Chancroid

Chancroid is an STD very common among prostitutes and men who have sex with prostitutes. It is one of the genital ulcer diseases that is associated with increased risk of transmission of HIV.

9) Pubic Lice

Pubic lice are parasites which often spread through sexual activities. It can also spread to other persons while handling the clothing and bedding of an infected person. This disease is common among prostitutes and women in brothels. These lice are visible to the naked eye. They are pinhead in size, oval in shape and appear reddish-brown when full with the blood of the host. The eggs of the lice can be seen clinging to the base of pubic hair.

10) Cytomegalovirus Infections (CMV)

CMV is a member of herpes virus family. This can be found in sexual fluids, saliva and urine. It can spread through sexual contact, physical contact such as kissing or handling diapers of an infected child, contact with the infected infant's saliva and urine. The infected mother can pass on CMV to her baby before birth.

11) Scabies

Scabies are usually transmitted through sexual contact. It can also spread from the sheets, towels and other household articles used by an infected person. Pregnant women should not attempt self-medication. They should consult a physician.

12) Human Papillomavirus

Human papillomavirus (HPV) is an STD affecting men and women. It is reported that there are about 60 types of HPV. It has been found to be

associated with the development of cervical cancer, vulvar cancer, anal cancer and cancer of the penis.

13) Genital Warts

Genital Warts are caused by certain types of HPV. These are contagious and spread through sexual contact. In pregnant women, the genital warts may enlarge during pregnancy making urination difficult. In case of warts developing on the vaginal wall, obstruction during delivery is common. Therefore an infected pregnant woman may require cesarian. Infants born to infected women may develop warts in the throat leading to obstruction of the air passage.

14) Hepatitis

Hepatitis is basically an inflammation of the liver. There are several types of hepatitis. Some of them are very dangerous. Hepatitis-A is usually transmitted through sexual activities with an infected person. It is most commonly spread by food and contaminated water.

Hepatitis B, C and D can be spread through:

- * Sexual activities involving an infected person
- * Needle-stick accidents among health care workers
- * Mother-to-child transmission of HBV during birth.
- * Blood transfusions

- * Use of unsterilised needles used on an infected person
- * Personal contact with an infected person.

The blood, saliva and sexual fluids are the major sources of infection.

15) Pelvic Inflammatory Disease (PID)

PID is an infection of the upper genital tract in women who have STD. PID can affect ovaries, uterus and fallopian tubes. If untreated, it can lead to tubal pregnancy, chronic pelvic pain and infertility. Sexually active teenagers are more likely to develop PID than older women.

It may be noted that there are also several other STDs. One should always consult a doctor to avoid complications. The diagnosis and treatment of STDs in India is not very expensive.

Exercise # 7.1

Answer the following questions in brief

1. Why do we consider STDs as serious diseases?
2. India is a fertile ground for the rapid spread of STDs. Substantiate this statement.
3. Describe briefly the relation between STDs and HIV.
4. Women are most vulnerable to get infected with HIV and STDs. Explain.
5. List out the most vulnerable groups in India who are likely to get infected with STDs.
6. Social change taking place in India during the last two decades have contributed to the spread of STDs. Discuss.
7. How can we justify that STD related health problems tend to be more severe and more frequent in women than in men?
8. What are the important points to be told to an STD patient by a care provider?
9. Make a list of various types of STDs discussed in this chapter in alphabetical order.
10. How do Gonorrhea spread in children and new born infants?
11. How Hepatitis B, C and D can spread from one person to another?

Exercise # 7.2

Mark (✓) 'true', 'false' or 'do not know' against each of the following statements.

		True	False	Do not know
1.	An STD infected mother can pass on the same to her child.			
2.	All types of STDs can be treated and cured.			
3.	Only a doctor can say whether an STD patient is fully cured or not.			
4.	Syphilis can be passed on to an unborn child from an infected mother.			
5.	An infected infant can spread CMV to another person.			
6.	STDs are found only in urban areas.			
7.	All the prostitutes are infected with one or another STD.			
8.	STDs are common among drug users.			
9.	Social change started in India in mid 1980s.			
10.	Men are responsible for spreading STDs.			
11.	Truck drivers are infected by HIV and not STDs.			
12.	STDs can be transmitted through blood transfusion.			

Exercise # 7.3

Fill in the blanks

1. The World Health Organisation has ranked among world's most pressing health problem.
2. Incomplete treatment for STDs might lead to infection.
3. in pregnant women can pass virus to the foetus.
4. Yellow-green or gray vaginal discharge is associated with
5. Chancroid is an STD very common among
6. can spread to people while handling the clothing and bedding of an infected person.
7. The STD that can spread from an infected infants' saliva and urine is known as
8. Self medication is not appropriate for a pregnant woman infected with
9. PID if untreated can lead to pregnancy.
10. Sexually Transmitted Diseases are commonly known as
11. is most commonly spread by food and contaminated water.
12. Chancroid, syphilis and genital herpes are collectively known as

Exercise # 7.4

Match the following

- | | |
|-------------------------|---|
| 1. Gonorrhea | 1. Women of child bearing age |
| 2. Genital herpes | 2. Visible to naked eyes |
| 3. Chlamydial infection | 3. About 40 per cent of population |
| 4. Bacterial Vaginosis | 4. No known cure |
| 5. VVC | 5. Inflammation of liver |
| 6. Public lice | 6. Cause infertility |
| 7. HPV | 7. A commonly reported STD |
| 8. Genital Warts | 8. Use of perfumed feminine hygiene spray |
| 9. Hepatitis | 9. STDs |
| 10. PID | 10. 60 types |
| 11. Youth | 11. Obstruction of air passage in infants. |
| 12. Venereal diseases | 12. Affects ovaries, uterus and fallopian tubes |

Exercise # 7.5

Group Game

Objectives

1. To enable the students to understand that there are many HIV/STD infected people moving around unnoticed.
2. To enable the students to understand how fast HIV and STD can spread within a society.

What to do

1. The teacher will instruct one of the students from the class to act as an HIV/STD infected person. The student is told to keep the matter a top secret.
2. The instruction is given to the student not in the classroom, but before the students are called for the group activity. Therefore none of the classmates are aware of the secret plan.
3. The student who has to act as an HIV/STD infected is told to scratch within the palm of the person whom he/she will come in contact with.
4. When the students have assembled in the hall or open space in the classroom, the teacher will explain to them about the group game, its purpose and the procedure.

- (i) Imagine that we are all meeting in a birthday party of one of us.
- (ii) When I say 'start', you will all pair out in groups of two.
- (iii) You may introduce yourself to one another by shaking hands.
- (iv) Talk to your friend for about one or two minutes about yourself, your plans for future studies etc.
- (v) After introducing each other, you will again pair out with a new friend.
- (vi) Repeat the procedure for about half an hour. In this process you will meet and introduce yourself to as many persons as possible.
- (vii) I may inform you that some of the students are instructed to act as HIV/STD infected. Therefore when they meet you, they will scratch within your palm when they shake hands with you.
- (viii) You should not reveal the person(s) to others when this happens.
- (ix) When you are scratched, you should also act as if you are also HIV/STD infected.
- (x) Therefore when you meet your next friend as you pair out, you will also greet the partner with a shake hand involving a scratch.
- (xi) After everyone has received a shake hand involving a scratch, we will stop the interaction and analyse the game.

Analysis

The teacher will guide the students to analyse the group game. Some of the leading questions that can be used are:

- (i) Let us ask to ourselves “who infected me with HIV/STD first?”
- (ii) What did you feel when you received the first scratch indicating that you have been infected with HIV/STD by your friend?
- (iii) How did you feel, when you performed the first scratch on your friend after you were infected?
- (iv) How did you feel going about scratching or infecting subsequent partners?
- (v) According to you, who was the first one among the group “acting as an HIV/STD infected.” (The first student instructed by the teacher may keep silent until he is identified)?
- (vi) Did you observe how fast the disease was spreading among the group?
- (vii) Were you able to identify any of the HIV/STD infected among you without getting a scratch.
- (ix) What do you think about this type of a game?

ALCOHOL, DRUGS AND AIDS

It is important and necessary for everyone to understand the relationship of alcohol, drugs and HIV/AIDS. Alcohol is an introducer of drugs. Young people who frequently drink alcohol are tempted to taste drugs. And drugs introduce them to all sorts of enjoyments including sexual activities. People who involve themselves in drug abuse usually share needles to inject drugs into their blood stream. Sharing of needles by the drug users helps in spreading HIV/AIDS. Drug users are also found to be sharing sexual partners. By involving in such sexual activities, HIV easily gets transmitted from the infected person to an uninfected person.

Alcoholic beverages are popularly known under two categories (i) country liquor (desi sharab), and (ii) foreign liquor (videsi sharab). Some of the common country liquor include mauwah, arrack, toddy, thadi etc. Some of the frequently used foreign liquor include: beer, rum, whisky, brandy, gin, wine, vodka etc. Usually these drinks provide the user with abnormal sensations and sometimes relief from pain.

Effect of Alcohol on Body

When a person drinks alcohol, it will slowly flow into the person's blood stream and spread throughout the body. Alcohol can affect the heartbeat and

blood pressure. It can also harm the liver. When the liver is poisoned by alcohol, the person can become very sick. It can also cause untimely death of a person. In addition alcohol can cause permanent damage to the brain.

Alcohol is Bad for Children

When children drink, they lose the ability to make clear and wise decisions. They may even do things that they would never do if they were not under the influence of alcohol. When a child is under the influence of alcohol, anyone can prompt him to take drugs. In this way, a child can also become addicted to drugs. Drinking can prevent a student's growth and learning process. Students also do not realise their limits and may not be able to decide upon their alcohol intake.

Some Indicators to Check Drinking

- * Does the student miss the school?
- * Is the homework done poorly?
- * Does the child not talk as much with family and friends?
- * Does the child do not like to do things he/she usually did?
- * Does the child have more accidents than usual?
- * How frequently he stays away from family and in the company of friends?

- * Does the child argue or fight with others?
- * Does the child have a sleeping problem?
- * Does the child have a new set of friends who may be using alcohol or drugs?
- * Does the child inform the parents/teachers/hostel warden where he/she is going and with whom?
- * Does the child demand more pocket money? How does he/she spend the pocket money?

Reasons for Drinking

If the student (child) is drinking, it is a sign that he/she is unhappy. The child may be having a problem. It does not mean that the child is bad. At this point, they need all the love, attention and understanding they can get. Some of the common reasons why a child may take to the bottle are:

- 1) **To feel grown up:** Children like to imitate adults. When parents drink, they usually send a message to their child that alcohol is okay. The child may like to experiment with drinks to feel grown up.
- 2) **To fit in and belong:** Children may want others to like them. Sometimes, they think that the group they want to join is using alcohol. They may try it too because they want to belong.

- 3) **To be able to relax and feel better:** Some children may think that a drink will help them cheer up. They may also think that drinking will help them forget a problem.
- 4) **To find out what drinking is all about:** Students may drink just out of curiosity.
- 5) **To be defiant:** Some children may drink only to seek parents' attention or reaction.
- 6) **To imitate people on TV, film etc.:** Commercials about alcohol advocate that one will become popular by drinking or one can have great fun by drinking. It does not highlight bad aspects of drinking like chances of accidents or the distinctive odour drink can cause.



7) **Bad company:** Students may get into bad company. There can be various reasons for a child to join a bad group of friends. Very often they join such groups unknowingly. By and by, they may become part of such a group and one may find it difficult to get out.

8) **Compulsion:** Sometimes, students may be forced to take drinks by their friends. This often happens with freshers in junior/professional/vocational colleges and institutions during the ragging period. Once a habit has been developed, it becomes difficult to change it.

Parents and teachers should inform each other of any doubtful signs seen in a child. The school, social worker, or counsellor will be of some help at this juncture. What a child needs at this stage is not punishment, but love and understanding. Inform the child that it is natural to have a problem. Make the child feel free to discuss his/her problem and seek help.

How to say 'No' to Alcohol

In the following, let us discuss some of the ways to help the students/children to say 'No' to alcohol:

1. **Be a role model:** Children are very keen observers. They watch and register in their minds what parents do and say. They usually have a feeling that the actions of their parents are admissible. Parents and later teachers are their immediate role models. Children should be taught that drinking is only a choice for adults.

- 2. Regular and friendly communication:** Parents and teachers should develop the practice of free and frank discussions with children. This should be done regularly. It will enable children to discuss any issue that may bother them or their friends. Topics like alcohol, drug addiction, smoking etc. can become issues for discussion.
- 3. Development of values:** Teach the children what is right and what is wrong. This will enable them to resist pressure from friends. Teach them to respect elders and teachers. Help them to seek support, strength and comfort from within their family.
- 4. Teach family rules:** Children must be taught family rules. Tell them that they may not drink or smoke or take any type of substance offered by their friends. Tell the children that they should report everything to the parents or elders in the family. Teach them that drinking is illegal, unhealthy and unsafe.
- 5. Praise and recognition:** Children should be praised for their efforts. It is not enough that children are praised when they bring good marks or win a prize. They should be praised for their sincerity and efforts. Success may not always come around. Similarly, children's success in everything should be recognised. Children also may help the family with certain suggestions during times of crisis. All their contributions should be recognised. This is essential, especially during the teenage period.

6. **Encouragement:** Children come across “ups and downs” in their self-image. Encourage them to find something to do that will give them enjoyment. Expose them to hobbies, sports, reading etc. other than drinking. Encouragement can go a long way in keeping children close to their teachers and parents.
7. **Sharing responsibilities:** Children should be made to contribute in their own little ways to the family. Ask them once in a while to help you around. They should be made to feel that they are contributing to the family. It may be setting the table, cleaning the house, re-arranging the furniture in the house, cleaning the vehicle, gardening etc. Entrust them with small responsibilities initially. Let them know that they can be trusted.
8. **Mistakes and discouragements:** Parents and teachers should know that children will commit mistakes. They will also find it difficult to agree with certain suggestions. These are all part of growing up. They should be pardoned for their mistake and help them to avoid it in future. Similarly, the child should be made to understand why he/she is being corrected. Do not display anger at children in front of others as their dignity should be respected.

Effect of Drugs on the Body

Drugs are chemicals. They facilitate or antagonize the body's normally occurring functions. The chemical substance can have certain effects on the cell. It can increase activity, decrease activity, increase sensitivity or disrupt the cell so that normal activity is sporadic. The effect obtained from a drug depends on the concentration of the drug at the site of the action. Other factors are: route of administration - injecting into bloodstream, inhaling and oral consumption, distribution, dosage, expectation of the user and the frequency of use.

Commonly Abused Drugs

There are several types of drugs available to the common man. Among the most commonly used drugs by people in India for centuries include: opium, cannabis, alcohol, tobacco, charas, ganja, bhang, cocaine etc. It is important and necessary for parents and teachers to be familiar with the names of some of the most commonly abused drugs by our young people.

1) Amphetamines

Amphetamines are stimulants. Students sometimes use it to keep awake for long nights during the preparation days for their exams. It is possible that some students take them out of ignorance when their friends offer them. It is usually taken orally in the form of a tablet. Some addicts dissolve it in water or alcohol. After dissolving it, addicts also inject them into their blood stream. School and college students call it by different

names such as: black beauties, chicken powder, white crosses, cross roads, drivers, wake-ups, roses, oranges, beans, splash etc.

2) L.S.D.

LSD is the name of a semi-synthetic derivative of Ergot Fungus of Ryc. It is a substance that grows on grain. Most addicts take them orally. Some addicts inject them into their blood stream. Other names of L.S.D. popularly used by drug abusers include: California sunshine, black widow, coffee, blue heaven, beast, window panes, etc.

3) Barbiturates

Barbiturates are a kind of tranquilizers. It can reduce anxiety. If taken in slightly larger doses, it will act as sedatives to induce sleep. There are over one thousand different types of Barbiturates which are taken orally.



Some people also inject it into the blood stream. Barbiturates are also known by other names such as: devils, red birds, blue birds, blue devils, blue bullets, candies, soft balls, christmas trees, etc.

4) Cocaine

Cocaine is a white, odourless fluffy powder. It looks like crystalline snow. It is made from leaves of the coca plant. It is taken orally in powder form. Many people also consume it along with betal leaves. Cocaine is known as “King of Drugs”. This is because of its high price. The other names of cocaine include: coke, coconut, crax, jam, snow, rock, lady snow, dream girl, gold dust, paradise, nose candy, incentive etc.

5) Marijuana

Marijuana is found in the flowering tops and leaves of the Indian hemp plant. It is a mind altering drug. When the flowers and leaves of the hemp plant are dried, they are collected and crushed to make marijuana. Hashish and charas are made out of the leaf dust and ground seeds of marijuana. It is usually smoked through cigarettes, pipes or cheellum. It can also be eaten along with honey. Some of the popular names of marijuana are: Mary, glass, pot, cage, bush, Columbian, sticks, Indian hay, Bombay black, charas, sweet Lucy, etc.

6) Mandrax

Mandrax is a sedative drug. It is available in the form of a tablet. It is also known by other names such as: ludes, downers, mandies, etc. Its pharmaceutical name is methaqualone.

There are several other drugs available for consumption in India. Some of them include: opium, magic mushroom, morphine, methadone, petrol, kerosene, snake venom, scorpion venom etc.

Some Indications for Drug Abuse

If a child or a student is a victim of drug abuse, it is easily detectable. He/she will certainly show some indications which can help us to find the truth. Some of the most commonly noticed symptoms or signs are given below. If a child is found to be showing at least three or more of these signs, we can suspect him/her for drug abuse. The common indications are:

- * Lessening of family attachment
- * Sudden loss of appetite or weight
- * Secretiveness about whereabouts
- * Moodiness
- * Increased time spent day dreaming
- * A sudden change in behaviour

- * Lack of concern about appearance
- * Over-reaction to any action or criticism
- * Loss of ambition
- * Keeping friendship with people who are unwilling to meet the family
- * Loss of interest in former activities
- * Desperation for money
- * Loss of money from one's home
- * Use of words associated with drugs
- * Trouble with short-term memory
- * Sudden drop in grades
- * Diminished attention span
- * Pills not identified as medicine are found in his/her possession.
- * Fumbled thinking
- * Slurred speech
- * Keeping certain articles hidden at home etc.

What can be done?

Parents and teachers need to take a conscious decision in dealing with young people involved in drug abuse. We shall list some of the important points to be kept in mind while trying to help the victims of substance abuse.

- * Approach a professionally trained counsellor or Psychiatrist for guidance.
- * Try to locate a spiritual guide who may help the child and the parents with spiritual and emotional support.
- * Understand the child. Make him/her feel wanted.
- * Addicts cannot give up drugs easily. No recovery is possible by stopping drugs.
- * Do not treat the child on your own. Only a specialised person (usually a physician) can treat the child to become normal and give up taking drugs.
- * A drug addict can be fully cured.
- * One has to accept reality. A child turning out to be a drug addict is not a curse from God. You may learn many things in the process. Every problem has an answer. Even in the thick of the biggest problem, God will be the right answer.

- * When you find that a child is on drugs, try to learn more about drugs -- its what, why and how.
- * Do not become upset. The problems can be solved. Pray to God. Take the child to the physician. Be patient. Everything can be solved in course of time.
- * Do not lose your temper. It is difficult to face reality. Calm down. Talk to your trusted well wisher. Take a conscious decision. Do not do anything in haste.
- * Do not create guilt feelings in the child. What the addict needs is understanding.
- * Treatment usually takes a long time. One will require a few months to get well. In some cases, one may require six months or even more.
- * Do not hospitalise a child by force. Treatment at home will be the most appropriate.

The best way to prevent a child from becoming an addict is to love the child. Create a feeling that he/she is wanted. Spend time with them. Let them know that you know everything about their life, needs, problems etc. Be frank with the child so that the child will in turn be frank with you.

Exercise # 8.1

Fill in the Blanks

1. Alcoholic beverages are known under two categories (i)
(ii)
2. Alcohol can make a child to lose ability to make and
..... decisions.
3. If a student is found drinking, it is a sign that he/she is
4. Children may drink just because of
5. It is important to recognise children's contribution during the
..... period.
6. It is important to the dignity of a child.
7. Amphetamines are
8. Barbiturates are a kind of
9. Hashish and charas are made out of the leaf dust and ground seeds of
.....
10. A can be fully cured.

Exercise # 8.2

Match the following

- | | |
|------------------------|-------------------------------|
| 1. Country liquor | 1. A reason for drinking |
| 2. Whisky | 2. To keep awake at night |
| 3. Alcohol consumption | 3. Kind of drugs |
| 4. Bad company | 4. Mauwah |
| 5. Role model | 5. Marijuana |
| 6. Amphetamines | 6. Answer to all problems |
| 7. L.S.D. | 7. Videsi sarab |
| 8. Cocaine | 8. Methaqualone |
| 9. Indian hemp plant | 9. Home treatment |
| 10. Mandrax | 10. Semi-synthetic derivative |
| 11. God | 11. Brain damage |
| 12. Drug addict | 12. Parents and teachers |

Exercise # 8.3

Answer the following questions in brief

1. Describe the relationship between alcohol, drugs and HIV infection.
2. What do you understand by country liquor and foreign liquor?
3. Excess alcoholic consumption can lead to permanent damage to the brain and death of a person. Explain.
4. Why do we say that alcohol is bad for children?
5. Describe some of the indications to know whether a child has started drinking.
6. List any six reasons that may motivate a student to drink.
7. How can parents and teachers help the students (children) to say 'no' to alcohol?
8. Discuss briefly the effects of drugs on human body.
9. Name some of the commonly used drugs by drug addicts.
10. What are some of the signs and symptoms indicating that a student/child is using drugs.

Exercise # 8.4

Mark (✓) 'true', 'false', 'do not know' against each of the following statements.

		True	False	Do not know
1.	Alcohol can easily transmit HI✓ from one person to another.			
2.	Injecting drugs by sharing a needle can transmit HI✓.			
3.	It is alright for children to consume desi sarab.			
4.	A child having sleeping problem can be an indication that he/she is drinking.			
5.	Regular and friendly communication between children and parents may help children to drink.			
6.	Students (children) should be given severe punishment when they make mistakes.			
7.	It is alright to take amphetamines to keep awake for long nights during examination days.			
8.	It is not safe to take barbiturates although it can reduce anxiety.			
9.	Pills not identified as medicine found in the possession of a child/student is an indication that he/she is taking drugs.			
10.	If a child is found to be abusing drugs, he/she should be stopped from it by force.			

Exercise # 8.5

Exhibition

Topic

Impact of Drug abuse among youth

Objectives

1. To help the students to learn about the what, why and how of alcohol, drugs and HIV.
2. To enable the students to learn and as well as to teach other students about the impact of HIV/AIDS and substance abuse.

What to do

1. Motivate the students in the class to put up an exhibition.
2. The teacher may constitute a five member exhibition committee.
3. Each member may be allowed to form a sub-group of 3 to 4 members depending upon the strength of the class.
4. The class teacher along with the five member exhibition committee will select five broad topics.
5. Each member will either choose a theme of their choice or go for a lottery system (chits) to choose themes.

6. Then each of the five sub-groups will discuss on the topic/theme and formulate the objectives.
7. Then a classroom discussion to finalise the theme and their objectives will be held in which every student will participate.
8. Then a day will be chosen for the exhibition.
9. December 1st of each year will be ideal because first of December is kept as World AIDS day.
10. Then each group is asked to discuss and finalise their presentation.
11. The presentations may include posters, audio/visuals, items made of clay, wood, paper, etc. depicting various aspects.
12. The exhibition may focus on creating awareness and for generating and passing on messages.
13. If the school cannot sponsor for the expenses, then the students may have to mobilise their own resources in a modest way.
14. The exhibition can be held on a competitive basis between classes or various sections of a class. It can also be an inter-school competition.
15. Probable sub-themes or topics can be generated from this text book itself. Each chapter or sub-themes within a chapter can be a topic.

GLOBAL AND NATIONAL SITUATION OF HIV/AIDS

AIDS is considered to be the most recent global health problem facing people from all walks of life. The HIV infection is now found in almost every country. It has crossed all barriers. Sexual activities outside marriage and sharing of drug injecting equipment are the two major means of HIV transmission among adults.

According to World Health Organisation (WHO) projections, by the year 2000, a total of about 40 million men, women and children world wide will have been infected with HIV. More than 90 per cent of those infected will be from developing countries.

The first AIDS cases were reported in Los Angeles and New York (both in USA) in 1981. Researchers found that these young men were all homosexuals. Many of them also suffered from STDs. By the end of 1981, doctors in the Zairean capital Kinshasa also began to document dozens of cases. As the medical profession began to back track through the 1970s, it became clear that some of the earliest cases of AIDS were detected among Africans.

Traces of HIV infection were found simultaneously in Haiti, European countries, countries in the American Continent and in Africa. Because of this,

researchers began to doubt whether HIV existed around the world for sometime. After considering medical histories of patients, these researchers found a few probable cases of HIV/AIDS, going back nearly 30 years in the three continents -- Europe, Africa and America.

The accuracy of reporting HIV and AIDS cases varies from country to country. This is because of different reasons. The developed countries and small countries in Europe have advanced testing systems. These countries have professionally trained personnel to conduct the testing. Further, because of the high literacy rate and better communication facilities, people are made aware of the need for testing for HIV. Above all, there are large number of counsellors at every level along with professionally trained social workers to guide people. Because of all these factors, people feel free to go for HIV test.

In developing countries, the HIV testing facilities are not adequate. Most of these countries do not have good testing kits. They also do not have sufficient number of trained personnel to conduct HIV testing. Counselling services are almost nil. Awareness about the HIV/AIDS disease is very limited. Even among the urban well educated public, awareness about HIV/AIDS is sadly lacking. The situation in the rural areas is far worse. There is hardly any educational programme on the subject. Due to these drawbacks, very little testing takes place.

According to many international organisations and conventions, for every reported case of HIV in the developing countries, scores and hundreds of

cases remain unreported. Therefore, it is very difficult to derive accurate and authentic information on HIV/AIDS rates in these countries.

Based on the available data from various parts of the world concerning HIV/AIDS and the recent trends in its spread, WHO has generated a probable range of projected new HIV infections during the 1990s. This is presented in table 9.1.

Table 9.1

Estimated Adult Population and HIV Prevalence in Mid 1993 and by 2000

Mid 1993			2000		
S.No	"Macro region	Estimated HIV prevalence	Estimated population aged 15-49 years (1990)	Projected HIV Prevalence	Projected population aged 15-49 years
1	2	3	4	5	6
1.	Australia Europe & North America	> 1.2 million	646 million	1 million	675 million
2.	Latin America & Caribbean	> 1.3 million	227 million	> 2 million	282 million
3.	Africa	> 6.5 million	289 million	> 9 million	397 million
4.	Asia	2 million	1527 million	8 million	1843 million
5.	Global Total	> 11 million	2689 million	> 20 million	3197 million

During this decade, around 10 to 15 million new HIV infections may be expected in adults. Most of this will be in developing countries. During the same period, as many as 5 to 10 million children will be infected at birth or through breast-feeding. Majority of these cases will be in Subsaharan Africa and Asia. For the year 2000, the present WHO projection estimates a

cumulative total of 30 to 40 million HIV infection. Among them, more than 90 per cent will be in developing countries. When I am writing this text book, the cumulative total of HIV/AIDS around the world has crossed the 30 million mark.

The first cases of HIV/AIDS were found among Africans who sought medical treatment in Europe. As a result of this, a number of research studies were initiated. These researchers found that HIV/AIDS was widespread throughout Central Africa. Most of these cases were associated with heterosexual contact. Blood samples preserved in laboratories in Africa as early as 1965 were found to be contaminated with HIV. Medical records also show that cases consistent with HIV/AIDS were found among Africans as early as 1975. The old HIV case so far traced, is in the blood sample taken and preserved since 1959 in Africa. There is also a case on record about an English sailor, who had been in Central Africa in 1958. The preserved tissues of this patient was also analysed for HIV. It was confirmed that this person also had AIDS like disease.

It is difficult to determine the prevalent rate of HIV in African and Asian countries. In Kinshasa, Zaire, examination of preserved blood of pregnant women found that antibody positive rate rose from 0 per cent to 8 per cent over a period of 16 years. It may be important to note that by 1989, HIV/AIDS was the leading cause of death among males in Central African cities. The AIDS disease was the second leading cause of death among females in those cities. In most of these cases, prostitution and drug abuse have served as the major cause of HIV among the heterosexual population.

Among the Asian countries, Thailand has a large number of HIV/AIDS cases. Some of the preliminary analysis show that by the year 2000, Thailand may have about 3 to 4 million HIV infected cases. HIV/AIDS cases have also been reported from Republic of Korea, Malaysia, Lao PDR, Philippines, Indonesia, China, Mangolia and SARC countries.

HIV/AIDS cases have also been reported from Australia, Japan, New Zealand and other countries in the Asia Pacific Region. In the United States of America, gay men (homosexuals) still account for majority of cases reported each year. However, it is becoming more prominent in the young as well as in heterosexual men and women. HIV/AIDS is now one of the three main causes of death for men and women in the age group of 25 to 40 years in USA. It is among the top 10 causes of death for children below the age of 4 in USA.

Situation of HIV/AIDS in India

The HIV/AIDS population in India is not uniformly distributed. It is also not rising at a uniform rate in various States and Union Territories (UTs). Some of the factors contributing to this situation are:

- (i) the time and place where the infection first appeared
- (ii) the effectiveness of prevention campaigns
- (iii) the effectiveness of testing system
- (iv) the Socio-cultural and religious background of the people
- (v) the means of transmission
- (vi) the presence of other STDs and communicable diseases, and
- (vii) the type of health delivery and reporting system available in the country.

As reported earlier, the first HIV/AIDS cases were reported from Chennai and Mumbai in 1986. Upto June 1998, a total of over 6000 cases were reported to the National AIDS Control Organisation (NACO) in the Ministry of Health and Family Welfare-from 32 States and UTs. Initially, the reporting was very poor. Because of the improvement in the testing system, cases are being increasingly reported from various parts of the country. During the past couple of years, there has been substantial increase in the number of new cases. It is also a fact that the virus is continuing to spread unabated. Most of the cases reported are in the age group of 15 to 49. The male - female ratio is 3:1.

Among the reported cases of HIV/AIDS in India so far, about 45 per cent were thought to have acquired the infection from hetero-Sexual activities. The sero-positivity rate of the HIV per 1000 samples were found to be 22.39 per cent. Maharashtra, Tamilnadu, Manipur, Karnataka, Goa, Pondicherry and Delhi have significantly higher infection rates.

A glance at Table 9.2 will indicate us the existing situation of HIV/AIDS in various States and UTs of India. This data is provided from NACO, Ministry of Health and Family Welfare, Government of India as on March 1998.

Table 9.2

State-wise distribution of the reported cases of AIDS on March 1998
Blood samples

S.No	State/Union Territory	Screened	HIV Positive	AIDS
1	2	3	4	5
1.	Andhra Pradesh	73841	698	42
2.	Assam	12717	173	22
3.	Arunachal Pradesh	495	0	0
4.	Andaman & Nicobar Islands	12495	95	0
5.	Bihar	9129	29	3
6.	Chandigarh	55812	196	
7.	Punjab	1488	65	100
8.	Delhi	317182	1278	212
9.	Daman and Diu (UT)	250	8	1
10.	Dadra & Nagar Haveli (UT)	160	1	0
11.	Goa	63926	1540	12
12.	Gujarat	423006	902	134
13.	Haryana	144969	332	1
14.	Himachal Pradesh	13851	92	9
15.	Jammu & Kashmir	8981	40	2
16.	Karnataka	381722	3551	120
17.	Kerala	44547	215	105
18.	Lakshadweep (UT)	755	7	0
19.	Madhya Pradesh	93604	415	134
20.	Maharashtra	397912	42195	2513
21.	Manipur	29975	5327	301
22.	Mizoram	29329	96	5
23.	Meghalaya	14081	59	8
24.	Nagaland	8548	429	10
25.	Orissa	82990	213	2
26.	Pondicherry (UT)	79351	2600	132
27.	Rajasthan	21748	347	54
28.	Sikkim	389	3	1
29.	Tamilnadu	703708	10931	1092
30.	Tripura	5600	3	0
31.	Uttar Pradesh	94548	996	109
32.	West Bengal	163950	645	57
	Total	3281059	73481	5181

Source: NACO, Ministry of Health and Family Welfare, Govt. of India.

HIV/AIDS in South India

The first HIV case in the country was reported from the South Indian State of Tamilnadu. Among the States in the Southern part of the country, Tamilnadu has better facilities for testing for HIV. In fact as on date, Tamilnadu carried out maximum number of screening blood samples for HIV. However, there is limited documentation of cases and the actual rate of incidence is not available. In Tamilnadu, the hot spots for HIV are Chennai, Madurai and Vellore.

HIV Surveillance began in Kerala in 1985. A large number of its population migrate to the Gulf and other countries in the West, particularly America, in search of jobs. Many are deported back to the State when they are found to be carrying the HIV virus. Thousands of people from Kerala also work in Bombay, Delhi, Calcutta and other cities of the country. Several of them get infected and return to the State. Many of them infect their spouse and sometimes others too.

The State has deluded itself about the actual situation. There is a misconception that the “high risk group” approach cannot be applied in Kerala. Instead, it is the “high risk factor” that is more relevant to the HIV situation in the State.

While Kerala takes the credit for providing Ayurvedic treatment to HIV infected, Bangalore city has set up the first free residential facility for those

who are HIV positive. In this centre, the patients will undergo intense treatment, based on a 12 step programme. This programme is aimed at making them optimistic about their acceptance of the disease and take each day as it comes.

HIV/AIDS in North India

The testing facility in the Northern part of India remains inadequate. However, HIV cases have been reported from every State and UTs in this region. A large number of cases have been reported from New Delhi. In fact, this capital city has the best of medical facilities in the country. In spite of that, innocent Thalesmia patients (mostly children) have been infected with contaminated blood. The astonishing fact is that in some cases, blood supplied from the Red Cross Society Blood Bank have been found to be contaminated. This alone indicates that one should be extremely careful in accepting blood which has not been properly tested for HIV.

HIV cases have been reported from Tihar Central jail. Patients have been refused treatment even from premier institutes like the All India Institute of Medical Sciences as well as other known Government hospitals in the capital.

Reports gathered from various States and UTs in the Northern region reveal that there has been less testing in this part of the country due to shortage of trained personnel and poorly equipped HIV testing centres.

HIV/AIDS in West India

Mumbai in Maharashtra seems to be the most vulnerable city in India from the point of view of the risk factor. But the disease has spread to other parts of the State. In fact, the State is already been severely hit.

It is estimated that Central Mumbai alone has over one lakh prostitutes. Over 30 per cent of these prostitutes are known to be infected with HIV; and over 90 percent of them have one or another STD. Mumbai also houses an unspecified number of street children, drug addicts and call girls. This commercial city is being visited by a large number of tourists from within and outside the country.

A large number of truck drivers who pass through Maharashtra, Gujarat and Rajasthan are reported to be having casual sex on high ways in this region. Many of them are found to be ignorant about HIV and STDs. The other vulnerable groups in this region are the tribal population living on highways of Rajasthan, eunuchs, and professional blood donors. Goa has also been reporting increasing number of HIV and AIDS cases recently.

HIV/AIDS in East India

Except Arunachal Pradesh, all other States in the North-East are reported of having HIV/AIDS cases. However, in Arunachal Pradesh so far only 495 blood samples have been screened for HIV. That is a very small sample compared to the population of the state. Calcutta and Paradeep port on the

coastal area of Orissa are faced with an HIV/AIDS epidemic. Manipur, parts of Mizoram and Nagaland are in crisis as AIDS spreads along with drug smuggling routes of Burma. Equally worrying is the likelihood that the virus is spreading along the highways that run through these States into Assam and beyond.

Manipur shares a common international boundary of 352 Kms with Myanmar, Thailand and Laos (Golden Triangle). Heroin is easily available in this state from the Golden Triangle through Myanmar's free borders. Assam is the gateway to Nagaland and Manipur. Therefore drugs smuggled into Manipur and Nagaland also easily find a route through Assam.

One of the major routes of HIV transmission in Manipur and other nearby States in Northeast, is through injecting drug users. Another major factor for the spread of HIV/AIDS here is the large floating population, comprising truck drivers and defence and para-military forces who indulge in extramarital sexual activities.

One of the most successful AIDS intervention project in Calcutta is the one initiated by All India Institute of Hygiene and Public Health (AIHPH). This project probably has the highest number of 'peer educators' in the world. The peer educators are all sex workers. They are the back bone of this programme. These sex workers wear 'uniforms' sponsored by the AIHPH i.e. government green coats over their saris and badges with a red cross which states: "Peer Educator". Several NGOs are also involved in creating awareness among the people in the Northeast to prevent and control HIV/AIDS in this region.

Exercise # 9.1

Answer the following questions in brief

1. Which are the two major means of HIV transmission among adults?
Discuss.
2. In developed countries people feel free to go for HIV test. Why?
3. In developing countries very little HIV testing take place. Describe the possible reasons.
4. Give a brief account of HIV/AIDS in foreign countries.
5. Give a brief account of AIDS in South India.
6. Why in North India there has been less HIV testing?
7. HIV seems to have been spreading in Europe, Africa and USA almost during the same period. Explain.
8. Give a brief account of WHO projections about HIV for the year 2000?
9. The HIV cases reported so far in India are not uniformly distributed among various States and Union Territories. Discuss the reasons.
10. Give a brief account of the situation of HIV/AIDS in Maharashtra.

Exercise # 9.2

Mark (✓) 'true', 'false', 'do not know' against each of the following statements.

		True	False	Do not know
1.	The first AIDS case was reported from Africa.			
2.	Blood samples contaminated with HIV/AIDS were preserved in Africa from mid 1960s.			
3.	By the end of 1980s, HIV/AIDS was the leading cause of death among males in Central African cities.			
4.	HIV/AIDS is the major cause of death among adults in USA.			
5.	Most of the HIV/AIDS infected in Kerala have brought the disease from Gulf countries.			
6.	Aayurvedic treatment can cure HIV/AIDS cases, if diagnosed earlier.			
7.	Blood supplied from the Red Cross Society in India is safe for transmission.			
8.	Over 90 per cent of Prostitutes are infected with HIV/AIDS in Mumbai.			
9.	The major cause of the spread of HIV/AIDS in Rajasthan is the tribal population.			
10.	Calcutta and Paradeep ports are faced with an HIV/AIDS epidemic due to the interaction with foreign traders.			

Exercise # 9.3

Match the following

- | | |
|--|-----------------------------------|
| 1. The most recent global health problem | 1. 3:1 |
| 2. The first AIDS cases were reported in | 2. 1985 |
| 3. Most of the HIV carriers are reported in the age group of | 3. Bangalore city |
| 4. Male-Female ratio of HIV in Laos | 4. Thailand, Myanmar and India |
| 5. HIV Surveillance in Kerala | 5. Peer educators |
| 6. Ayurvedic treatment | 6. AIDS |
| 7. First residential facility for HIV positive | 7. 15-49 |
| 8. Golden Triangle | 8. Mostly found in the North-East |
| 9. Injecting drug users | 9. 1981 |
| 10. AIHPH | 10. Kerala |

Exercise # 9.4

Fill in the blanks

1. More than per cent of those infected will be in developing countries.
2. According to WHO projections, by the year 2000, a total of about to million men, women and children world wide will have been infected with the HIV.
3. The first AIDS cases were reported from and in 1981.
4. The earlier cases of HIV/AIDS in Africa were found to be caused by contact.
5. The oldest case of HIV/AIDS so far traced has been found in the blood sample preserved in Africa since
6. The major cause of HIV among the heterosexual population in Africa is reported to be and abuse.
7. In USA still account for majority of HIV cases reported each year.
8. Most of the HIV/AIDS cases reported in India are in the age group of to
9. Among the reported cases of HIV/AIDS in India upto March 1998, about 45 per cent were thought to be acquired through
10. 'High risk-factor' and not "....." is more relevant to the HIV situation in Kerala.
11. is the only State which has not reported any HIV/AIDS case until the middle of 1998.
12. Peer educators comprising sex workers are found in city.

Exercise # 9.5

Home Work

Objectives

1. To enable the student to understand the spread of HIV and AIDS in various parts of the country.
2. To help the student to identify various States and Union Territories having more and less cases of HIV/AIDS cases.

What to do

1. The teacher instructs the students to draw a big map of India showing all the States and Union Territories in India.
2. The students are asked to mark the number of:
 - (i) Blood samples screened in the State
 - (ii) No. of AIDS cases reported from each State
 - (iii) No. of HIV cases reported from each State.
3. Statistical data given in Table 9.2 in this chapter is to be used.
4. If the teacher feels it alright, she can announce prizes for the first three well prepared map. For this, opinion of a team of judges comprising three teachers from the school may be sought.

HIV HIGH RISK GROUPS IN INDIA

We know that most infectious diseases strike the very young and the very old. However, we are now witnessing an epidemic that is engulfing people in their productive years, namely, in the age group of 15 to 49. All estimates show that nearly 90 per cent of those infected by HIV/AIDS in India are in their productive age. The reported cases of HIV/AIDS in the country clearly show that HIV has not spared any class, community, group, religion, profession, qualification, age, colour and sex. Therefore, it is important that we examine some of the potential HIV/AIDS target groups in our country.

It is a fact that people practicing certain high risk behaviours are more vulnerable to contract HIV/AIDS than the general population. Two of the most risky behaviours are:

- i) Involving in sexual activities outside the marriage.
- ii) Involving in injecting drugs and sharing needles.

There are also other activities that can place you under high risk of contracting the HIV/AIDS virus. Let us briefly describe some of the HIV/AIDS high risk groups in India.

1. Sex Workers or Prostitutes

The HIV/AIDS virus is primarily transmitted from one person to another through sexual activities. There are various categories of persons who are vulnerable to HIV infection through sexual contacts.

- i) In every culture, society and nation one does come across prostitutes. These are mostly women who sell their bodies for a price (money). Some men also involve in male prostitution. Because they accept money for providing sexual satisfaction to their customers, the prostitutes are also called sex workers. In some countries, they are also called comfort women.

There are various forms of prostitution. In big cities and towns, they live in certain areas known as Red Light Districts. Women who practice prostitution live in groups in such areas. There are middle men who bring customers to them.

- ii) Call girls are those who live a more comfortable life. They usually serve customers in their homes or hotels.
- iii) There are also sex workers who live in brothels. They are kept in brothels by brothel keepers by force. They have no freedom to go out of the brothel premises. Very often they have to provide sexual satisfaction to several men in a day.

- iv) There are women from some of the tribal communities who practise prostitution as their profession. Most of these prostitutes live along highways. Truck drivers are their usual customers.
- v) There is also another group of young girls who are called Devadasis. These are young girls usually from very poor families who are offered to temples. Almost always, these dancing girls are sexually exploited and they also become sex workers.

2. Other Forms of Sexual Abuse

- i) Sometimes freshers in colleges, universities, and professional institutions are forced into sexual activities. Peer group pressure also causes students to indulge in homosexual and heterosexual activities during ragging period.
- ii) Casual sex among adolescents and students are common in big cities and towns. Many young girls become pregnant and seek abortion. Some boys motivate young girls for sexual activities with promises of marriage. In short, there is this culture of pre-marital sex to some extent among our youth.
- iii) Sometimes girls and boys are motivated or forced into sexual activities with relatives. These incidents are very seldom spoken outside family circles. Incest is a common practice in rural and urban areas.

- (iv) There is also the unhealthy practice called wife-swapping. This is also prevalent in India in industrial towns and big cities. This practice often takes place among rich families. Usually five to ten pairs of couples join together and play the keys or chits or lucky dip. Accordingly, the women have to sleep with the men whose names are found in their lucky dip chits.
- v) The worst of all activities is rape of young girls and women. In some cases, HIV infected or STD infected persons seek sex with virgins (minor girls) believing that they would be cured of their illness. This is a wrong notion.
- vi) Tourism involving sex is another high risk activity. In some cities, tourists are provided young girls during the period of their stay for a price. This practice is common in many countries. It has now found a place in India too.
- vii) Sex in the workplace is a common phenomena. Employers and top officers exploit young girls and colleagues in the offices. Many girls and young ladies are forced into sexual activities, for job security and in some cases for promotion. This practice is common even among people working in paramilitary and armed forces.

2. Implications

Indian Society does not appreciate sex outside marriage. Most of our people believe in one or another religion. None of the religions in India approve of sexual activities outside marriage. Therefore, there is “guilt feeling” attached to such activities.

Even after marriage, sex is permitted only between husband and wife. It is a private and personal activity allowed by God. A man and a woman are expected to remain faithful to each other.

Through the practice of sexual activities outside marriage, a person is at risk of getting infected with HIV/AIDS and STDs. That will destroy one's life. An infected person (wife or husband) can pass the HIV/AIDS virus to his/her partner as well as to an unborn child. It is infact the destruction of one's family. This will in turn cause economic hardship as well as earn a bad reputation.

Some of the advertisements encourage people to “use condoms to have sex”. This is not meant for the husband and wife. It is a false propaganda to encourage people to involve in sex outside marriage. If a husband and wife are faithful to each other, they do not need condoms to protect themselves from HIV/AIDS or STDs.

Therefore, you should not accept wrong teachings and awareness programmes where they encourage you to use condoms to have sex. A decent life if lived will bring you peace of mind and happiness. You will find dignity and honour which will be a very good example to your family members, children, friends etc.

3. Homosexuals and Lesbians

God has created all living things “male and female”. Therefore all plants, animals, birds and human beings are created as male and female. There are very few exceptions in which reproductive organs may be missing in some of these living things. Otherwise, every living thing has reproductive organs and capability to re-produce. This is the richest and most beautiful gift God has given us. By this, He has made us His partner in the process of procreation. Therefore, sex is something beautiful, sacred and very precious. It cannot be and should not be misused.

Misusing sex and the reproductive organs is an act of challenge to God, the creator. That is why such actions are called sins. By the misuse of sex, one will not be able to make any good gains. Only ill health, guilt feelings and indignity are the gains that illicit sex can bring to one.

Therefore, through homosexual and lesbian activities, one is playing with the greatest of all gifts given by God. It is really a matter of

concern. Unfortunately, people have become so preoccupied with worldly affairs, that they have forgotten God, one's religion, family values and one's own blessed parents.

The silly and illogical arguments of some people in favour of same sex relationship is unfortunate. Some countries and small religious communities have framed laws in favour of people who wish to remain in same sex relationships. Let us not become a victim of their propaganda.

Same sex sexual relationships are very high risk activities. In fact, the very first cases of HIV/AIDS were found among people involved in same sex relationships. This trend continued in the United States of America until recently. In fact, the very activities involving in same sex relationships are not normal. Oral penetrative sex as well as anal penetrative sex are high risk activities. These cause bleeding and breaks in the sex organs. In case of oral sex, sex organs get hurt with the teeth. In case of anal sex, penetration becomes painful for both active and passive partners as the anus cannot receive an erect penis. In the process, both the penis as well as the tight rectum suffer injuries or tears.

It may also be noted that most of the same sex activities are not healthy. In fact, some of them are dirty and at high risk of getting infected with HIV/AIDS and STDs. Above all, several reports reveal

that a passive partner is very often forced into doing a particular act. Sex can never be enjoyed by force. It then becomes a cruel or sadistic act done without concern for the dignity of the individual.

Some sex relationships are commonly found in: (i) Massage Parlours, (ii) Hostels where people of the same sex live (iii) Prisons (iv) Welfare institution taking care of clients belonging to the same sex like Nari Niketan, Beggar's Home, Juvenile Homes, Orphanages etc. (iv) camps of armed forces; (v) among street children and (vi) among child labourers kept in camps; etc.

4. Eunuchs

Involvement of eunuchs in the flesh trade is not a new phenomena in our country. Eunuchs were employed by King to take care of his harem. They are a high risk group in India today. They are estimated to be over one million in India. They run brothels, they serve homosexuals and lesbians, and also cater to bisexuals in hotels.

They are also a dangerous group. School and college going students should keep away from them. They kidnap young males, castrate them and force them to join their gang. Thousands of illegal castrations are carried out by them. Most of their victims die of infection because of the cruel procedure involved in cutting off the genitals with unsterilised knives. The number of born eunuchs in the country are not even one percent of their total number.

5. Sperm Donors

People who donate sperm can also pass on HIV if they are infected. There are several sperm banks located in various parts of the country. The usual donors of sperm in the country are the poor labourers, beggars or street vendors who make a living out of it. Many drug addicts also donate sperm for a price to buy drugs. There are also reports of students from professional colleges who donate sperm for making additional pocket money.

Many women are forced to seek abortion when they learn about the status of the semen donors. There are documented cases at least in some countries when HIV has been transmitted through artificial insemination.

There are many issues surrounding sperm donation, particularly in a country which we boast has religious, moral, philosophical, social and cultural values. What has happened to this so called strong and sacred “husband-wife” relationship? What will be the personal, psychological and social lives of children born through artificial insemination, the identity of whose fathers is not known? What an agonizing experience it would be for the child to know its genetic heritage? And now what trauma it would cause to the mother, the child and the husband of the women if the sperm donated to them contained HIV? Therefore, every effort needs to be taken to focus on this target group seeking donor

insemination (DI), to prevent the unabated spread of HIV. Like the blood donors, semen donation has become a big business whose beneficiaries include sterilized men, people already infected with HIV and other deadly diseases including hepatitis B. In fact, instead of reducing social and human problems, perhaps we are on the way to creating a new social disorder with added problems and human sufferings. In other words, we are heading for a disastrous situation unless we change our life style as well as our thought processes.

6. Health Care Providers

In India, we have over a million health care providers. They include doctors, nurses and other para-medical personnel working in big and small hospitals and health clinics. Some of the research studies conducted in major hospitals show that a large number of health care providers do not take appropriate precautions against HIV. Many do not know how HIV can be transmitted from one person to another. There are several documented cases in India about health care providers getting infected with HIV. They get exposed to HIV through needle pricks and by hurting themselves with other medical instruments.

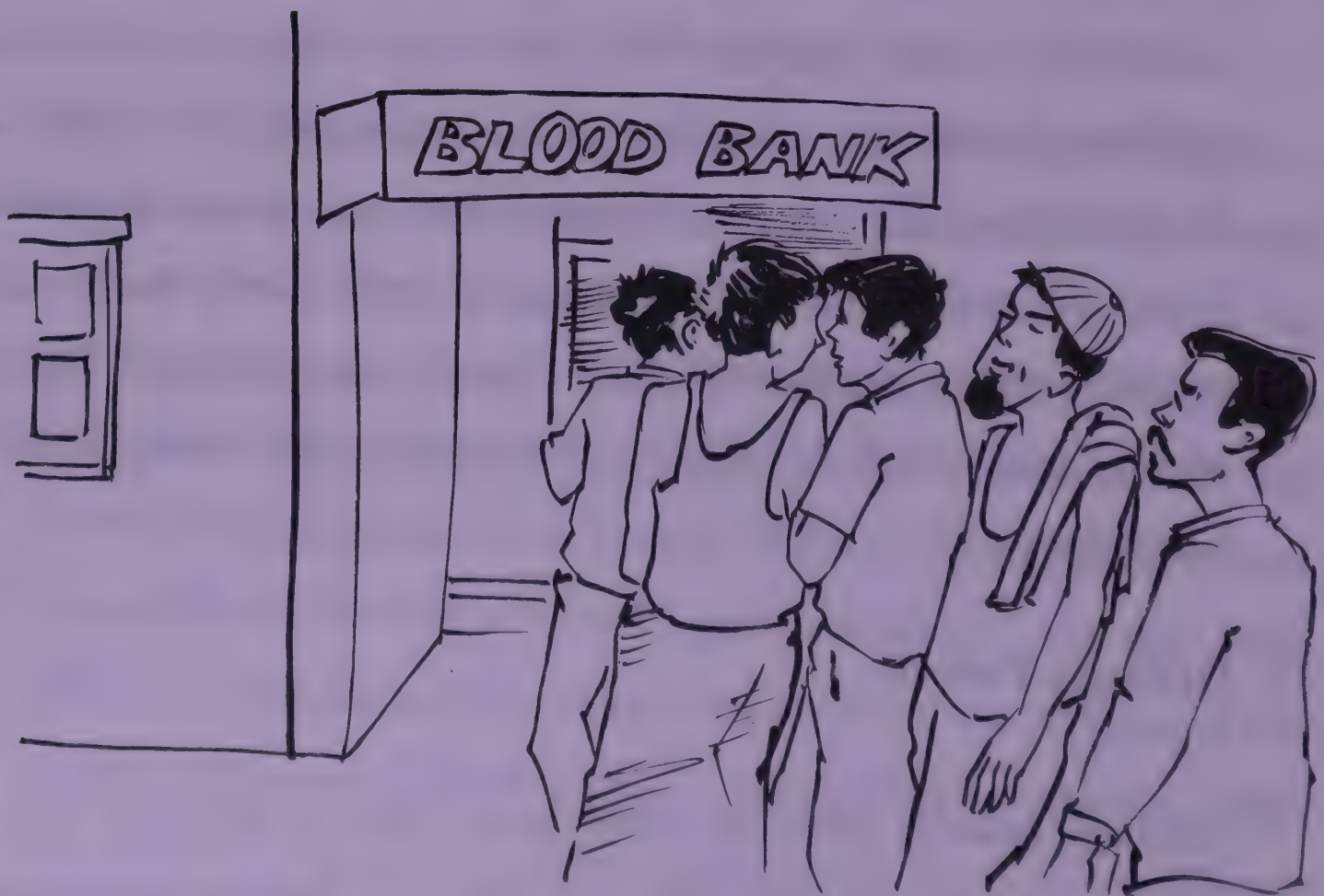
7. Ordinary Patients

Ordinary patients going for treatment are also at increased risk of getting infected with HIV from hospitals. If injecting needles and

surgical equipments used on HIV patients are not properly sterilised, the virus can be passed on to an uninfected person when such instruments are re-used on them.

8. Professional Blood Donors

Professional blood donors are persons who repeatedly donate blood to blood banks. They are usually very poor and unhealthy people. Many of them are found to be HIV carriers. Therefore, you have to be careful while accepting blood for transfusion. Even blood received from the Red Cross Society of India has been found to be contaminated.



But you can receive blood from healthy uninfected voluntary blood donors who are known to you or who are related to you.

9. Intravenous Drug Users

Injecting drug users are a potential channel for the transmission of HIV. The HIV/AIDS virus is passed on to an individual from an infected drug addict while sharing a needle and syringe used by him/her. Small volumes of blood remain inside the previously used needles and syringes. That is enough to infect an uninfected person. In India, injecting drug users are one of the high risk groups for HIV. There are a large number of HIV infected persons especially in the North-Eastern parts of India who got infected through sharing needles. They are mostly students and unemployed youth.

10. Thalassemia and Hemophilia Patients

Thalassemia patients require frequent blood transfusions. Hemophilia patients frequently require blood clotting factors. These people are at a great risk of getting infected with HIV. We have already many cases in India where these patients have been infected with HIV contaminated blood.

11. Other Target Groups

Apart from the high-risk groups described above, there are a number of people who also require adequate information about safety

measures in order to prevent the transmission of the HIV virus through blood. These include:

- a) persons working in barber shops, beauty parlours and their customers;
- b) persons involved in using skin piercing instruments for the purpose of piercing nose, ears etc.;
- c) persons involved in tattooing;
- d) persons selling kidneys and other organs;
- e) recipients of blood and blood products; and
- f) persons involved in home care of the HIV infected.

Care has to be taken while planning any programme for sensitization among all types of risk groups so that adequate provision is made to address issues, not only to the risk groups but also to their beneficiaries as well as their immediate relatives.

12.HIV infectd Mothers and their Children

HIV infected mothers can pass on the virus to their children before or during birth. They can also pass on the virus to the child through

breast feeding. It is estimated that about 30 per cent of children born to HIV positive mothers may get infected with HIV. All children born to HIV positive mothers will show antibodies for HIV. It will take about 18 months for these³ antibodies to disappear. Therefore, in order to confirm whether a child has HIV or not, you may have to do the HIV test when the child is about 2 years old.



Some unhealthy and sickly mothers may not be able to feed their infant with breast milk. In some hospitals, milk collected from other lactating mothers are given to the infants. Usually, poor women admitted in general wards sell their breast milk. This is not a healthy practice. There are cases when HIV has crossed over to infants through breast milk.

The above discussion only reveals that people can get infected through various ways. The contributing factors are many. You have to be careful about these factors in order to avoid getting infected with HIV.

Exercise # 10.1

Fill in the blanks

1. Nearly percent of HIV infected in India are in the age group of 15-49.
2. In some countries prostitutes are also called
3. Call girls serve customers in their or hotels.
4. God has made us His partner in the process of
5. There are over eunuchs in the country.
6. Health care providers are exposed to HIV through
7. require frequent blood transfusion.
8. It is estimated that about per cent children born to HIV positive mothers may develop AIDS.
9. All children born to HIV positive mothers will have antibodies to
10. has been detected in breast milk.

Exercise # 10.2

Match the following

- | | |
|-------------------------------|--|
| 1. Sex workers | 1. In temples |
| 2. Kept by force | 2. Sex usually involving a child with its relative |
| 3. Tribal prostitutes | 3. Ill health, guilt feeling and indignity |
| 4. Devadasis | 4. Harem |
| 5. Freshers | 5. Unhealthy |
| 6. Incest | 6. High risk group |
| 7. Illicit Sex | 7. Prostitutes |
| 8. Homosexuals and lesbians | 8. Brothel inmates |
| 9. Eunuchs | 9. Haemophilia patients |
| 10. Artificial insemination | 10. Ragging |
| 11. Professional blood donors | 11. Same sex |
| 12. Blood clotting factor | 12. Truck drivers |

Exercise # 10.3

Mark (✓) 'true', 'false', 'do not know' against each of the following statements.

		True	False	Do not know
1.	Red light districts are very dangerous place.			
2.	Sex with virgins can cure STDs and HIV.			
3.	Wife-swapping is a practice existing in Industries.			
4.	Tourism sex is not a phenomena found in India.			
5.	Sexual exploitation is a common in workplace in India.			
6.	"Use Condoms to have Sex," is a positive suggestion.			
7.	Misusing sex and the reproductive organs is an act of challenge to God.			
8.	Homosexuality and lesbian activities are against God and nature.			
9.	Donor insemination is a high risk activity.			
10.	Professional blood donors in the country are very rich.			
11.	Tattooing is a practice which cannot spread HIV.			
12.	In India, one cannot get HIV from a barbershop.			

Exercise # 10.4

Answer the following questions in brief

1. Why do we say that HIV has not spared any class or groups in India?
2. Which are the two most risky behaviours that can help in the transmission of HIV?
3. List some of the commonly known categories of persons who are vulnerable to HIV infection through sexual contacts.
4. Describe the disadvantages of having sex outside marriage.
5. What is the general attitude of Indian society and major religions towards sex outside marriage.
6. Same sex relationship does not care for the dignity of an individual. Explain.
7. Name some of the places where same sex relations may develop.
8. Write a brief note about the Eunuchs in India.
9. What are the disadvantages of sperm donation and artificial insemination?
10. Injecting drug users can spread HIV by sharing needles. Explain.

Exercise # 10.5

Debate

Objectives

1. To enable the students to learn social and moral values.
2. To help the students to develop positive attitude towards self and honour the dignity of other fellow human beings.

What to do

1. Invite at least six volunteers.
2. Divide them into two groups of three each.
3. Additional members can be added in equal numbers to both the groups.
4. Write down the topics on small chits and keep them in a box.
5. Ask each group to send their leader.
6. The teacher directs one of the group leaders to pick up a chit.
7. The topic is read out to the students.

8. One group will speak for the motion and the other against the motion.
9. They may be given sufficient time to prepare. In some cases, a teacher may give them as many as five or seven days to prepare. This will enable them to do library work and discuss with other experts to collect sufficient materials.
10. The time duration may vary from forty five minutes to one and half hours.

Topics

1. Blame not the sex workers, blame those who go to the sex workers.
2. Hate homosexuality and not the homosexuals.
3. Artificial insemination is the result of science and technology development and not a challenge to God.
4. "Use Condoms to have Sex," is a safe propaganda.
5. The Indian Society does not approve or appreciate same sex relationship.

PREVENTION OF HIV/AIDS/STDs

HIV/AIDS is a killer disease. There is no known cure for it as yet. Therefore, once infected, sooner or later, the person will die of HIV/AIDS defining illness. At present, we have no vaccine which can prevent us from getting infected. Doctors and medical scientists all over the world have tried to study the disease. They continue to do research to discover drugs (medicines) that can cure the AIDS disease. They are also trying to develop a vaccine which can prevent people from getting infected. But all these efforts have not produced any satisfactory result.

The HIV/AIDS disease is in existence for almost two decades. Perhaps no other virus has undergone so much research as the HIV virus. Yet we have not achieved any breakthrough. Therefore, the only solution available for the prevention and control of this disease is proper awareness. This awareness should reach everyone all across the country. There is need to consciously develop a well designed HIV/AIDS education programme. Such a programme will aim at providing accurate and complete information on various aspects surrounding the AIDS disease. It will also aim at removing myths, misinformation and misconceptions about HIV/AIDS.

Prevention of further HIV infection is the only tool that is available with us to control this pandemic. Everyone has a right to information. Proper

Education about HIV/AIDS will help people protect themselves and others from infection by HIV. Education is the only medicine available in the world to contain the HIV epidemic. All preventive education programmes should offer much more than just information. While sharing information, they should also include the exploration of values and aim at development and practice of skills.

To educate people about HIV/AIDS/STDs, it is first necessary to overcome denial. Almost every country in the world, which has been faced with the problem of HIV infection, has first reacted by denial of the facts. This is true of many States even in India. In fact there is an attempt by some people to hide the extent of the problem. Until we acknowledge the existence of the problem, changing risk behaviour of potential target groups will not be possible.

The Need of the Hour

What we require today is to contain the further spread of HIV/AIDS/STDs. We also need to take care of those who are ill with HIV infection. Rehabilitation of the victims of HIV faced with social isolation is of utmost importance. Therefore, let us briefly discuss some of the preventive measures keeping in mind the routes of HIV transmission and the potential target groups described in previous chapters.

Sexual Transmission

Prostitutes and the female population as a whole should not be seen as a commodity available for sexual pleasure. Our tradition, our culture, our social norms, our religions, our philosophy and our value system do not propagate misuse or abuse of human beings. Every human being is created with a purpose and order. And let us also remember that through the birth of every child, God is telling us that “He is not fed up of human beings.” Without a woman, a man is incomplete. Similarly, without a man, a woman is incomplete. The religious scriptures clearly state: From the beginning of creation, ‘God made them male and female. For this reason, a man shall leave his father and mother and be joined to his wife, and the two shall become one flesh. So they are no longer two, but one flesh. Therefore what God has joined together, let no one separate.’



It is unfortunate that some of our people are also involved in same sex relationships. The sad fact is that there are some people who strongly advocate same sex relationships, in our country. No doubt, these are mostly people who have returned from foreign countries. In fact, the sponsors (donor agencies) of projects for people involved in same sex relationships are from foreign countries. It is a matter of great regret that those responsible for safeguarding the interests of our tradition, culture and religious values have taken no interest to monitor these new developments.

It is a known fact that the sexual activities carried out by people involved in same sex relationships are high risk activities. Apart from oral and anal sex, people are also involved in sex with animals. These are all unhygienic activities. They also downgrade the dignity of human beings. It is certainly not healthy for a society to promote such activities.

It is true that there are vices in every society. For example, cliptomania is an undesirable activity. It is a crime before society. At the same time, we also know that it is a psychological sickness. Therefore, instead of condemnation, we have to approach the problem with understanding. Similarly, due to one or another reason, a person may be motivated or attracted towards the same sex. The family background and social environment in which one has grown up certainly influence a person to develop such inclinations. Such persons need understanding and help from every quarter - family, friends, society, religion as well as emotional and psychological support. Instead, it can be disastrous to encourage a person to develop and maintain unhealthy practices which have already become threats to our society.

Our society is known for sheltering and promoting the third sex - the eunuchs. Very little research has been conducted on this group in India. But they are a large population consisting of over a million eunuchs. However, available information show that very few - not even one per cent eunuchs are born eunuchs in the country. There are exceptions. People do come into the world as blind, deaf, dumb, mentally retarded etc. Similarly, a very small percentage are also born without proper organs.

Somehow, our culture permitted the eunuchs to have their own organised life. This has prompted them to make additions to their population. When born eunuchs are very limited, the best source is to catch and castrate young boys and young men. Thousands of such castrations take place every year in India. Since many of these castrations are done outside medical environment, most of the castrated males die of infection. One estimate shows that about 75 per cent of the castrated person die of infection.

The eunuchs are held in high regard by some sections of our society. It is a known fact that eunuchs provide sexual satisfaction to those who have normal sex organs. They are reported to be providing anal and oral sex to their customers. They also keep in captivity young girls, in brothels run by them. Therefore, it is a matter of great concern in India to consider the possibility of HIV transmission through the activities of eunuchs.

Parents and teachers must caution their children and students about the dangers involved in interacting with eunuchs and strangers.

Sperm donation and artificial insemination are practices that are the product of modern science and technology.

Sexual activities among adolescents, street children, drug addicts, prisoners and persons in armed forces have no formal sanction of our Indian society.

The most safest and surest way to avoid HIV is to mend one's behaviour in terms of sexual activities. It is unfortunate that whatever is being supplied in terms of information dissemination in our country advocates only one message -- use condoms to have sexual intercourse. Where are our traditional, cultural, social and religious values which always gave us one and only one message: "No sex before marriage - have sex after marriage; that too only with your spouse?" If we are faithful to ourselves, then we don't need a condom to protect ourselves against HIV/AIDS/STDs. If we remain faithful to our spouse, there is no question of getting infected with HIV. The old saying "history repeats itself" seems to be proving true in this regard. It is man who thought and developed social and behavioural norms in the society in terms of family life, marriage, and sexual restriction. The advancement of science and technology and propagation of the "freedom theory" have overpowered the societal norms giving way to vulgarity. Now man is once again shown his place and his limitations by the AIDS pandemic.

The present policy to promote condom use in India, as if it is the only method to prevent HIV/AIDS has met with stiff resistance. This was an idea borrowed from foreign countries where sexual freedom is an accepted norm of society. It has proved wrong in the Indian context -- a society which has

not accepted the theory of “freedom of sex” outside marriage. As a result, all efforts to bring about awareness and proposals for AIDS and sex education have met with strong opposition. In fact, most parents and teachers disagree with the very idea. One of the possible reasons is that the policy makers almost ignored the feelings of the people.

The best way to prevent the spread of HIV through sexual activities are:

- * Practice abstinence before marriage.
- * Have sex only with your uninfected and faithful spouse.
- * Educate yourself and your family members all about HIV/AIDS; how it is spread and how to avoid it.
- * Do not involve in sexual activities with homosexuals, strangers, prostitutes etc.
- * Educate yourself about moral values and the teachings of your religion.
- * Seek guidance from your parents, teachers and elders in your family.
- * Experimenting sex with anyone outside marriage even for once can infect you with HIV.
- * Do not blindly believe that the condom gives you full protection against HIV/AIDS. In fact it has not shown 100 per cent safety against birth

control. We in India have very poor quality condoms which are very unreliable. Do not trust a condom and put your life into danger.

- * Live in dignity. Have respect for the opposite sex. Nobody stops you from mingling with the opposite sex or making friendship. It is worth waiting till marriage to have sex.
- * If you wish to have an uninfected virgin as your spouse, the same may be the desire of your spouse/would be spouse. Therefore, if you want someone to wait for you, you should also wait for some one to share all you have.
- * Life will be thrilling, meaningful and joyful, if you can take care of yourself for some more time.

Transmission through Blood and Blood Products

Transmission of HIV from one person to another is possible through the use of unsterilized needles, syringes and other skin-piercing instruments like surgical equipments.

Therefore, you should be careful in getting an injection from a hospital or health clinic. Carry a fresh disposable needle. That is the best way to avoid infection. Or you must ask the nurse or doctor whether the needle is a fresh and sterile one before they use it to inject you.



While visiting a barber for a shave, carry a fresh blade, or ask the barber to use a fresh blade.

While getting your/your relatives' ears or nose pierced, please ensure that a fresh and sterilized instrument is used. This is applicable for tattooing as well.

HIV/AIDS is passed on to a person through blood transfusion with contaminated blood. A person can also get HIV through tissue and organ transplantation. Anaemic persons, people requiring surgery and thalassemia persons usually need blood transfusions. Hemophiliac persons require blood clotting factor. All these are routes for HIV to cross over to an uninfected person.

Therefore, you must make sure before blood, tissue and any organ is required to be transfused or transplanted, that the HIV status of the person donating the same is verified. Blood supplied from any blood bank including that of the Red Cross Society should be tested for HIV. Do not accept blood from a professional blood donor. Many professional blood donors in India are found to be infected with HIV.

The practice of sperm donation and artificial insemination are high risk activities. It can infect the recipient with HIV. It is also an activity not permitted by most religions. In India, many communities do not approve of this practice. It also has wider implications for the child born through the unnatural way. Therefore, it is always better to avoid such actions for a healthy and peaceful living.

We should always remember one thing. God has a plan for each one, each couple and each family. It is better to abide by His decision rather than challenging Him through human ways. Therefore, let us try to live a life according to God's plan.

HIV/AIDS virus can be passed on to an uninfected person from injecting drug abusers. Needle sharing is a common practice among drug addicts. We already have thousands of HIV victims especially in the North-eastern states who have been infected through sharing needles.

Drug addicts also indulge in lot of sexual activities. Through these sexual activities, these addicts can easily pass on the virus to their partners - either

spouse or another person. It can also lead to the birth of an HIV infected baby. All these are undesirable activities which are not approved by our families, religion and society. Therefore, let us try to prevent these unhealthy practices for the well being of all of us.

Transmission from Mother to Child

It is a fact that HIV can pass from an infected mother to her child before, during, or shortly after birth. Transmission from an infected mother to her unborn child is estimated to be about 75 per cent of all paediatric AIDS cases. Among children born to HIV positive mothers, about 30 per cent are found to become infected with HIV.



There is no way to prevent a child from getting infected from an HIV infected mother when it is in the mother's womb. Other preventive measures are:

- * An HIV positive mother should not consider opting for motherhood.
- * If at all an HIV positive woman wants to conceive, she must seek counselling. It is essential that she also seek the opinion of her religious leaders who can guide her towards an appropriate decision.
- * If a pregnant woman discovers that she is HIV positive, she may not opt for an abortion. She must seek medical opinion as well as opinion of her religious leaders. However, she can and she must opt for a cesarian. This will prevent the child from getting infected during childbirth.
- * An HIV positive mother also should not breast feed her baby. HIV can pass on to the child.
- * Even though WHO recommends HIV positive women in third world countries to breast feed their babies, I don't think this recommendation should be followed by HIV positive mothers in India. At least 50 per cent of our people are above the poverty line. The HIV positive mothers falling in this group may not breast feed their child and thus infect their babies.

We should be cautious about reading literature on HIV prevention imported from other countries. We should also be careful while reading materials

copied from the western literature. There can be misleading messages. For example:

- * We in India have very few single parents (particularly mothers). There are few exceptions -- these are mostly the sex workers.
- * Women involved in lesbian activities hardly seek motherhood. Such a phenomena has not been found in India.
- * Similarly, HIV positive women in India hardly opt for motherhood. There are no such documented cases so far.

As mentioned in the beginning of this chapter, education about HIV/AIDS/STDs and a good understanding of their various aspects can go a long way to prevent and control HIV. The best way to contain the virus is to be faithful to one's religion, spouse and family. Let us follow the ways of God and nature and let us not become a victim of HIV through our foolishness.

Exercise # 11.1

Answer the following questions in brief

1. Why do you think proper awareness is important for the prevention and control of HIV/AIDS?
2. Which are the best ways to prevent the spread of HIV through sexual activities?
3. Let us try to live a life according to God's plan. To what extent this statement is true in relation to HIV/AIDS?
4. How can we prevent the transmission of HIV through blood and blood products?
5. List out the preventive measures by which we can prevent the transmission of HIV from a mother to her child.
6. Education for prevention is the best tool available to control the spread of HIV/AIDS. Explain.
7. What is the need of the hour in relation to HIV?
8. What do Scriptures say about male-female relationship?
9. Why do we say that same sex relationships are unhealthy?
10. "Eunuchs can spread HIV from one person to another." Discuss the statement.
11. The drug addicts can spread HIV through several ways. Explain.
12. "History repeats itself." What is the relevance of this statement in this chapter.
13. Why should we caution Indian readers of foreign literature on HIV?

Exercise # 11.2

Fill in the blanks

1. About percent of all paediatric AIDS cases are reported to be transmitted from infected mother to the child.
2. Sperm donation and are practices that are the product of modern science and technology.
3. Do not trust a and put your life into danger.
4. If an HIV positive mother wants to conceive she must seek
5. Once infected with HIV, the person is likely to die of defining illness.
6. HIV/AIDS is around us for about decades.
7. Everyone has a to information.
8. Every human being is created with a and order.
9. What God has joined together, let no one
10. There is no way to prevent a child from getting infected from an HIV infected mother when the child is in the

Exercise # 11.3

Match the following

- | | |
|--------------------------------|--|
| 1. Third sex | 1. Preventive Medicine |
| 2. Practice abstinence | 2. 75% of Paediatric AIDS cases |
| 3. Tattooing | 3. To avoid HIV infection |
| 4. Education | 4. Seek cesarian |
| 5. Cliptomenia | 5. Breast feeding by HIV positive mother |
| 6. Mend one's behaviour | 6. 50% people |
| 7. From infected mother | 7. Psychological illness |
| 8. HIV positive pregnant woman | 8. Eunuchs |
| 9. WHO recommendation | 9. Before marriage |
| 10. Above poverty line | 10. Sterilized instrument |

Exercise # 11.4

Mark (✓) 'true', 'false', 'do not know' against each of the following statements.

		True	False	Do not know
1.	The Vaccines currently used can prevent HIV, but cannot cure AIDS.			
2.	HIV/AIDS is a new area for researchers.			
3.	Proper awareness is the only solution available now for the prevention and control of HIV.			
4.	To educate people about HIV/AIDS/STDs, it is necessary first to overcome denial.			
5.	Our socio-cultural and traditional society tell us to misuse human beings.			
6.	Birth of every child is a message that he/she is likely to be infected.			
7.	Cleft lip is a disease associated with HIV.			
8.	Eunuchs involve in castration for change of Sex.			
9.	Sexual activities among street children and among persons in armed forces have the formal sanction of Indian Society.			
10.	Sexual freedom is an accepted norm of our society.			
11.	Private hospitals in India are safe from the point of the spread of HIV.			
12.	WHO recommendations regarding breast feeding by HIV infected mothers must be followed in India.			

Exercise # 11.5

Debate

Objectives

1. To enable the students to understand the need and importance of prevention and control of HIV/AIDS.
2. To enable the students to evolve strategies for the prevention and control of HIV/AIDS.
3. To enable the students to deliberate on issues and concerns surrounding prevention and control of HIV/AIDS.

What to do

1. Invite at least six volunteers.
2. Divide them into two groups of three each.
3. Additional members can be added to in equal numbers to both the groups.
4. Write down the topics on small chits and keep them in a box.
5. Ask each group to send their leader.
6. The teacher directs one of the group leaders to pick up a chit.
7. The topic is read out to the students.

8. One group will speak for the motion and one against it.
9. They may be given sufficient time to prepare. In some cases, a teacher may give them as many as five or seven days to prepare. This will enable them to do library work and discuss with other experts to collect sufficient materials.
10. The time duration can be 45 minutes to one or one and a half hours.

Topics

1. People in India are all aware of HIV/AIDS; but they don't care about its unchecked spread.
2. In the modern world there is no room to talk about religious and moral values for the prevention of HIV; what we need is a vaccine or drugs.
3. The life on earth is very short; let us enjoy it in all aspects and don't bother about HIV.
4. An HIV infected pregnant woman should be allowed to continue her pregnancy until the birth of the child.
5. Drug addiction is not a problem of school going students.
6. Students take to drug addiction because they fail to get love and attention of parents and teachers.

HIV/AIDS COUNSELLING AND CARE

People who do counselling are called counsellors. They are usually professionally trained in their job. The counsellors are people who are able to help others to understand their problems. They help their clients to determine the causes of the problem and examine the various factors contributing to the problem. They help the client to analyse the various dimensions of the problem, and then identify and find solutions. They enable the clients to make certain conscious decisions about necessary steps to be taken.

Counselling involves being with the client. The counsellor listens to the client when he/she talks about the problems, and fears associated with it. The counsellor helps the client to increase the his/her self-esteem. The counsellor also provides necessary and useful information based on what the client should know at that point of time.

Psychosocial Problems

Counselling is a skill that requires effective training to develop. Therefore, everyone cannot simply take up counselling. In HIV/AIDS cases, counselling has been recommended for pre-testing and post-testing. Much importance has been attached to counselling in HIV/AIDS. It is true that the HIV infected and their family members face a number of problems. Some of the psychosocial problems faced by them are: fears associated with informing the

family members about the test result; possible rejection by friends; fear of losing one's job; the stigma that surrounds the AIDS disease; depression; grief; possible economic crisis and the future uncertainties.

Responses of a Client

The usual response of a client faced with a positive test result includes shock, denial, anger, bargaining, fear, loneliness, self-consciousness, depression, acceptance and hope. These responses will be shown in varying degrees.

Importance of Counselling in HIV

We know that similar reactions are also found when a person is faced with certain other diseases like cancer which has hardly any cure. You may wonder, why unnecessary importance is attached to counselling in HIV/AIDS, when the nation is faced with other dreadful diseases.



HIV infection is very much associated with a person's behaviour pattern. If people are given proper information, they can be helped to modify their behaviour which will prevent them from getting infected with HIV. For example:

- (i) A person can be prevented from involving in sexual activities if he/she seeks proper counselling from a competent person.
- (ii) A person can be helped to say 'no' to abusing drugs and alcohol, if he/she seeks timely help from a counsellor.
- (iii) A person can be helped from taking life (suicide) if he/she seeks the help of a counsellor well in advance with one's problem.
- (iv) A person can be helped by a counsellor in any crisis situation.

Friend, Philosopher and Guide

The problems of daily life usually motivate a person to seek temporary relief. Without proper guidance and support, one can become a drug addict, seek sexual satisfaction by visiting a prostitute, develop a stealing habit in order to belong to his friend circle etc. A Counsellor is a friend, philosopher and guide to a client. Since HIV can be prevented largely by modifying one's behaviour pattern, counselling is recommended for people facing any kind of problem in life.

Counselling is an Old Concept

It may be noted that counselling is not a new concept. In developed countries, counselling services are very much available in schools, hospitals, place of work etc. One can find counsellors in urban and rural areas just as we can find schools and hospitals. Extensive university and college education and training is given for one to become a counsellor.

Counselling Services in India

Unfortunately, in India we have very limited training institutes providing educational services in counselling. Therefore, there is shortage of adequate number of trained counsellors. The general public is also not aware of the benefits one can receive from a Counsellor. Usually, people with serious problems approach psychiatrists and sometimes psychologists. But their services are limited and costly.

With the unabated spread of HIV/AIDS, many youth and others may be desperately looking for help as well as authentic information. Given the present situation in the country, school teachers and medical staff, particularly nurses could be the best persons to whom one can turn for help. The other option is social workers. Very often, people lack the skills, abilities and knowledge of a professionally trained social worker. But they are persons who can help clients to a great extent. Apart from this, one may approach a

religious leader who may offer some sort of emotional and spiritual support. When you are desperately in need of the services of a counsellor, you may try to locate a Social Welfare Agency in your neighbourhood. Very often, they will be able to get you in touch with a Social Worker. They may also refer you to a Counsellor from the immediate neighbourhood.

Counselling Techniques and Process

The Counselling techniques usually vary from country to country. Even within a large country like India, the techniques can vary depending upon the background of the population, their social, cultural, educational and religious background. The process involved in counselling can be as follows:

- * Listening actively
- * Trying to understand what the person is feeling
- * Asking good questions
- * Providing accurate and authentic information.
- * Providing support at the time of crisis.
- * Respecting people and their feelings.

- * Being non-judgemental while analysing the problem.
- * Encourage the client to change when a change is needed.
- * Help clients to focus and identify their immediate needs and may be long-term needs.
- * Help the clients to help themselves.

Who May Seek Counselling

Anyone who is troubled about HIV/AIDS infection may seek counselling. One may seek counselling out of fear of contracting the virus; or because a member in the family is HIV infected. Because of certain high risk factors, one may seek counselling. Generally, the following categories of people do so:

- * Persons requiring HIV tests.
- * Those seeking help because of past or current risk behaviour.
- * Those involved in sexual activities outside marriage.
- * Those involved in injecting drugs.

- * Those who may have doubts about the type of blood transfusion they had after 1986.
- * The family and friends of people infected by HIV.
- * Those involved in same sex relationship.
- * Rape victims.
- * Thalassemia and Haemophilia patients.
- * Health workers who might have exposed themselves to needle prick or hurt themselves with surgical instruments used on other patients.
- * People faced with emotional problems, family problems and any type of socio-economic crisis.
- * Persons suffering from any type of STD, etc.

Basic Information

The HIV counsellor should have certain basic information about the what, why and how of the HIV/AIDS disease. The counsellor should be in a position to have adequate information to help the client. During this process, some of the following points may be discussed.

- * Basic information about HIV/AIDS/STDs.
- * How HIV is transmitted?
- * The ways and means of preventing HIV or its further transmission to others.
- * The need for testing.
- * How to keep maintaining good health along with HIV infection?
- * Regarding disclosure of HIV status.
- * Preparation for living with HIV until death.
- * Need for follow-up.
- * The kind of treatment options and where to get them.
- * Supporting the process of anticipatory grief.
- * Assessing reactions of family members, friends, etc.
- * Need and importance to belong to an HIV support group.
- * Assessment of financial position and future requirements etc.

Principles of Good Counselling

The basic principles to be followed by a good counsellor are:

- * The client should be made to feel that the counsellor has accepted him/her without having a judgemental attitude. The client should also be able to convey through his/her reaction, acceptance of the counsellor. Therefore, mutual acceptance is very important.
- * The client should participate and fully be involved in the counselling process. This can be seen from the clients' participation in discussions, decision making and consequent follow-up.
- * The counsellor tries to relate to and help each client as an individual. The counsellor is conscious of the clients' cultural background, socio-economic situation and level of intellectual ability to comprehend, what is being discussed. Therefore, he/she adopts an approach of continuous individualization throughout the period of counselling. The counsellor should give due respect to the clients' right to make his/her own decision.
- * The quality of maintaining confidentiality demands from the counsellor, never to discuss outside the confines of professional relations anything that the client has shared with him/her.

- * Effective communication is the core of any successful HIV counselling programme. True communication can occur between the counsellor and the client only when the terms, symbols, gestures and facial expressions they use, carry shared meaning.
- * The skill of becoming conscious about self-awareness helps the counsellor to always make use of oneself, one's experience, education and competence in his/her relationship with the client, in ways to enhance the latter's ego-development and not necessarily one's own self.

Qualities of a Good Counsellor

Some of the basic qualities of a good counsellor are:

- * Patient and good listener
- * Objectivity and clarity
- * Culturally sensitive
- * Well informed about the subject as well as community resources
- * Self-disciplined
- * High regard and respect for others
- * Open and non-judgemental
- * Caring and empathetic
- * Acceptance of the client, his/her situation and environment, etc.

Pre-test Counselling

People who think that they may have exposed themselves to any of the high risk activities may seek pre-test counselling. The Counsellor will give necessary guidance regarding centres of HIV testing, whether one has to pay for a test, the amount to be paid, the time period during which one may seek an HIV test etc. The Counsellor will make an assessment of the risk factors involved, psychosocial factors as well as the extent of the client's knowledge.

During pre-test counselling, the client should be informed about limitations in the existing tests and testing procedures. There can be false-positive and false-negative results. A false positive result is one in which an HIV test result can be reported falsely. That means, the results are not authentic. A false-negative result is also not an authentic test result. In a false positive case, a test may indicate an uninfected person having HIV, whereas a false negative result may show an HIV positive case as an HIV non-infected case. A confirmatory test (often Western Blot) will provide accurate results. However, the client should be supplied with sufficient information regarding 'window period' and the difficulty in obtaining an accurate result. The pre-test counselling focuses on:

- * Extent of understanding of the client about HIV/AIDS/STDs,
- * Provide necessary information required by the client on HIV/AIDS/STDs, treatment options and facilities available,

- * Implications of a positive test result and negative test result,
- * Assist the client in taking a conscious decision for undergoing a test,
- * Explain the testing procedure,
- * Analyse the client's strengths and weaknesses in facing a positive test result,
- * Prepare the client for post-test counselling,
- * Examine the possible reaction of near and dear ones, and
- * Possible future plans.

Post-test Counselling

An HIV test may bring about a negative result, false negative result, positive result or a post positive result. The counsellor should be able to explain what each of these tests means. The reaction of the client to each of these test results will vary. Depending upon the client's strengths and weaknesses, the counsellor should prepare the client to accept the result. All these discussions are to be held in private, under conditions of confidentiality. The client should be given time to absorb the news. It is also a time to encourage him/her to make appropriate decisions in order to maintain good health. The

client should be helped to make conscious decisions about one's behaviour modification. Clients will express their feelings in different ways. The counsellor should be able to assist the client with different types of reactions like shock, denial, anger, bargaining, fear loneliness, self-consciousness, depression, acceptance, hope etc. For example, a counsellor can help someone with a positive result have hope about many things such as:

- * hope that he/she will live a long time
- * hope that his/her baby will be healthy
- * hope that each sickness will be treated as it comes
- * hope because they are loved and accepted for who they are
- * hope that scientists will find a cure
- * hope because of belief in life after death.

The most common mistake you can make when you try to counsel a client facing emotional pain is to try and change their feelings. Because you want people to feel better or get rid of their negative notions, you may try to convince them differently. But by doing this, you are sending out ideas that their thoughts are unacceptable to you, that they are failing you somehow unless they change. This type of reaction can only add to their feelings of

self-rejection and isolation. The trust you earn from a client must enable you to guard the privacy of the information shared. Never gossip or break this trust.

About Caring for the HIV/AIDS Patients

The HIV/AIDS patients require constant care and support. You should feel happy and proud to serve an HIV infected. You should not be afraid of getting infected by caring for an HIV/AIDS patient. If you are careful in cleaning the body, handling the clothes, helping the patient to the bathroom/toilet or cleaning the vomit, urine, etc. of a patient, you will not get infected. Only if an AIDS patients' body fluids including blood gets into your blood stream, you may get infected.

Dignity in Serving the HIV infected

Service done to an HIV infected is a Godly service. You will also learn a lot for your own personal and family growth. Make use of every opportunity to help people infected with HIV. We have very few people in India who know constructive details about HIV/AIDS. You are lucky to have gained so much knowledge about HIV/AIDS. Try to use it for the benefit of your own fellowmen.



When you are caring for someone with HIV/AIDS, you must watch your own reactions to the person you are trying to give care. If you find yourself becoming impatient, angry, disinterested etc. you are demonstrating signs of your unwillingness to help someone. Such signs and negative attitudes will not be helpful in serving the sick.

You should remember that your needs as a care provider cannot be ignored, but they should not be a burden to the person who is sick. He/She is already experiencing the grief of his/her own condition. Every care giver (either volunteers or family members or paid workers) also needs special time to bare their own anxieties to a third person. It can be a counsellor, physician, nurse, spiritual guide etc. Perhaps they may also help you to understand the sick persons' needs and fears.

Anxieties of an AIDS patient

When an HIV infected moves on to become an AIDS patient, he/she will have lots of worries and anxieties. They may think about the spouse, children, their future, status in society, financial stability, medication, last days before death etc. These are terrible moments and one may need frequent emotional support from the care givers, who may help them with suggestions. They may also tell them to turn to God who is the ultimate answer to every question that one may have.

Type of Care

Care giving can vary depending upon different situations and stages of illness. Some of the helps may include: bringing favourite foods, help with chores, watching over children and playing with them, telling stories, singing songs or playing music, reading out a story and even praying or helping one to pray. These are simple activities. But they are very significant and leave a deep

meaning and implications on an HIV/AIDS patient. Everyone needs the love and help of those around them. Isolation from family members, friends and from loved ones is frightening. It is very painful to experience rejection at this juncture of their lives.

Let us not isolate an HIV/AIDS victim. Instead let us follow the policy of **“love the sinner and hate the sin”**. Let us not become judgemental and condemn the infected. God has a plan for all of us. He may be sending us signals as he did for Sodom and Gomorrah.

Tips for the Patient

A care giver should be able to help the patient to remain strong and healthy. Some of the tips you could keep in mind to suggest to the patient are as follows:

- * Good food containing proteins, vitamins and carbohydrates is a must.
- * Stay as active as possible. Exercise will help prevent depression and anxiety. It will keep one pre-occupied.
- * One should be motivated to sleep and take sufficient rest.
- * Do not leave one's job if one is in service. Continue to work as long as possible. In some cases, an HIV infected and healthy person may

continue to live without necessarily developing symptoms of AIDS. Some of the earlier detected cases of people with HIV continue to live healthy without developing symptoms of AIDS.

- * The HIV infected should be kept busy with one or other distracting or meaningful activities.
- * Physical, emotional and spiritual affection are needed as frequently as possible.
- * Create situations when friends and loved ones can meet the patient as often as possible.
- * Provide situations where one can talk to others about their diagnosis and other problems they are facing after learning of one's infection.
- * The patient should continue medication without failure.
- * The patient should try and avoid other infections including further exposures to HIV. Each new infection will continue to weaken one's immune system.
- * The patient should be prevented from taking unprescribed medicines.
- * In our country, an infected person may be encouraged to seek Ayurvedic treatment from recognized hospitals.

Home Care

Those providing home care should follow certain guidelines to protect themselves from getting infected. Some of these are:

- * Wash hands with soap and water after changing soiled bedsheets and clothing.
- * The wounds of the patient as well as of the care giver should be properly covered.
- * Keep bedding and clothing clean. This will provide comfort to the patient.
- * Keep the soiled clothing and those with stains of blood, diarrhoea, vomiting etc. away from other household laundry.
- * The soiled clothing should be washed in soapy water and then dried.

Practice Good Hygiene

- * Always wash hands before: cooking, eating, feeding other people, giving medicine etc.
- * Wash your hands after using the toilet, changing nappies and cleaning an HIV infected person

- * Use clean water
- * Use boiled or filtered water for drinking, especially in urban areas
- * Frequently wash linen, towels, and other clothing
- * Practice changing of clothing, especially undergarments, daily
- * Store food and medicine safely
- * Always use clean plates, cups, drinking glasses etc.
- * Cover your mouth when sneezing or coughing
- * Avoid spitting in open spaces where people walk about
- * Do not kiss babies on their lips
- * Wash raw vegetables, fruits and meat before cooking
- * Wash and keep clean the toys used by children
- * Always dispose off waste and waste water properly

- * All waste materials and personal items like nappies etc. are to be safely deposited in containers meant for them. Keep them away from the reach of children
- * Proper waste disposal may include using pit latrine, or burning or burying them
- * Living room, bed room, toilets, washbasins etc. may be sprinkled with dettol.

Practising good hygiene is imperative to prevent the onset of common diseases. The information provided above regarding care of HIV patients will be very useful to everyone. Therefore, even if you do not have an HIV infected at home, this vital knowledge can be shared with your friends, family members and other relatives. HIV is spreading like wild fire and chances are that we may come into contact with the HIV infected during our lifetime.

Exercise # 12.1

Answer the following questions in brief

1. Who are the HIV Counsellors? How do they play the role in helping the client?
2. What are some of the psychosocial problems faced by a person who has been tested positive for HIV?
3. What are some of the responses expressed by a person tested positive for HIV?
4. List all the process involved in counselling.
5. Give a brief account of the importance of counselling in HIV.
6. Counselling is not a new concept. Explain.
7. A Counsellor is a friend, philosopher and guide to a client. Describe.
8. Do you think that we have large number of trained and competent counsellors in India? Discuss.

9. What are the possible options available for a client in India with regard to counselling services?
10. List out the various categories of people who may seek counselling in HIV.
11. What are some of the major points a Counsellor may discuss with the client.
12. Describe some of the principles of HIV Counselling.
13. What are some of the basic qualities of a good Counsellor?
14. What are the main points of focus involved in a pre-test Counselling?
15. What kind of hopes can be given to a client by the Counsellor?
16. Describe briefly some of the guidelines for those providing home care to an HIV infected.
17. Practice of Good hygiene is very important in this age of HIV/AIDS. Explain.

Exercise # 12.2

Fill in the blanks

1. People who do counselling are called
2. In HIV/AIDS, Counselling has been recommended for
and post testing.
3. HIV infection is very much associated with a person's
.....
4. A is a friend, philosopher and guide to a client.
5. Counselling may vary from country to country.
6. Counselling is a process of helping clients to help
7. Acceptance is a principle in
8. Effective is a core of any successful HIV counselling
programme.
9. To be caring and empathetic is a of a good Counsellor.
10. An HIV test can give false positive and results.
11. It is very painful to experience rejection from the
.....

Exercise # 12.3

Match the following

- | | |
|---------------------------------|--------------------------------------|
| 1. Counsellors | 1. Counselling technique |
| 2. Religious leaders | 2. A principle of Counselling |
| 3. Social Welfare agency | 3. Western Blot |
| 4. Being non-judgemental | 4. God |
| 5. Surgical instruments | 5. Spiritual support |
| 6. Continuous individualisation | 6. Service given to an HIV infected. |
| 7. Self-disciplined | 7. Help in finding a counsellor |
| 8. Confirmatory test | 8. Professionals |
| 9. Godly Service | 9. Health Workers |
| 10. The ultimate answer | 10. Quality of a good counsellor |

Exercise # 12.4

Mark (✓) 'true', 'false', 'do not know' against each of the following statements.

		True	False	Do not know
1.	HIV Counsellors are usually professionals.			
2.	Counselling can prevent a person from getting infected with HIV.			
3.	Counselling can cure a person from HIV infection in early stage.			
4.	It is alright for social workers and nurses to help a patient through counselling.			
5.	Counselling techniques and process involved in counselling are almost same.			
6.	Mutual acceptance is very important in counselling.			
7.	Maintaining confidentiality is an important principle of counselling.			
8.	An HIV false positive case show that a person has HIV.			
9.	An HIV false negative case show that a patient is HIV positive.			
10.	It is alright for a Counsellor to change the feelings of a client.			
11.	Serving and caring an HIV infected is dangerous.			
12.	A care provider does not require counselling.			

Exercise # 12.5

Role Play

Objectives

1. To help the students to understand what, the why and how of HIV counselling.
2. To demonstrate how a client and a counsellor interact in a counselling session.

What to do

1. The teacher will narrate a case of an HIV infected student to the entire class.
2. The teacher then asks for Volunteers to demonstrate the situation in various settings.
3. The scenes include:
 - i) Home - parents - brother/sister and the HIV infected child. The situation can be acted out like: (a) Pre-test situation after a blood transfusion; or (b) know the drug abusing habit of the child and doubts regarding HIV infection - illness etc; or (c) the involvement of the child in intimate friendship with a person of the opposite sex; etc.

- ii) School - reaction of teacher(s), students, classroom, playground, school bus, etc.
- iii) Neighbourhood - isolation; stigmatisation; gossip; sympathetic attitude of one or two who are very close etc.
- iv) Scene with the Counsellor or Social Worker in any of the situation.

The counselling session will show - taking appointment (narration); meeting the counsellor (first expression of the Counsellor); how conversation begins; demonstration of the knowledge of the counsellor on the subject; how Counsellor follows principles and techniques of Counselling etc.

4. The students will develop various scenes using their imagination. They may be given one or two weeks to prepare the scenes. Teacher will see the text and guide them.
5. After the role play, discuss and analyse the scenes and the messages one could get through the role play.

HIV SURVEILLANCE CENTRES

IN VARIOUS STATES/UNION TERRITORIES IN INDIA

1.	Andhra Pradesh	1.	Department of Microbiology, Osmania College, Hyderabad
		2.	Department of Microbiology, SV Medical College, Tirupati
		3.	Department of Microbiology, Andhra, Medical College, Vishakapatnam.
		4.	Instt. Preventive Medicine, Hyderabad
2.	Arunachal Pradesh	5.	District Hospital, Itanagar
3	Assam	6.	Department of Microbiology, Guwahati Medical College, Guwahati.
4.	Bihar		--
5.	Goa	7.	Department of Microbiology, Goa, Medical College, Panaji
6	Gujarat	8.	Department of Microbiology, BJ Medical College, Ahmedabad
7.	Haryana	9.	Department of Microbiology, Medical College, Rohtak.
8.	Himachal Pradesh	10.	Department of Microbiology, Indira Gandhi Medical College, Shimla
9.	Jammu & Kashmir	11.	Department of Immunopathology, Sher-e-Kashmir Institute of Medical Sciences, Srinagar.
		12.	Dept. of Microbiology, Government Medical College, Jammu
10.	Karnataka	13.	Department of Microbiology, Bangalore, Medical College, Bangalore
		14.	Department of Microbiology, Kasturba Medical College, Manipal
11.	Kerala	15.	Department of Microbiology, Medical College, Trivandrum.
12.	Madhya Pradesh	16.	Department of Pathology, Gandhi Medical College, Bhopal
		17.	Choitram Hospital and Research Centre, Indore
13.	Maharashtra	18.	Dept. of Microbiology, Seth G.S. Medical College, Bombay.
		19.	Department of Microbiology, JJ Hospital, Bombay
		20.	Sion Hospital, Bombay
		21.	B.Y.N. Nair Hospital, Bombay.
		22.	Rajabari Hospital, Ghatkopar, Bombay
		23.	B.J. Medical College, Pune.
		24.	Department of Microbiology, Govt. Medical College, Nagpur.
		25.	Civil Hospital, Kolhapur
		26.	District Hospital, Chandrapur
		27.	Governmental Medical College, Miraj
14.	Manipur	28.	J.N. Hospital, Imphal
15.	Meghalaya	29.	Civil Hospital, Shillong
16.	Mizoram	30.	Civil Hospital, Aizwal
17.	Nagaland	31.	Naga Hospital, Kohima
		32.	District Hospital, Dimapur

18.	Orissa	33	Department of Microbiology, SCB Medical College, Cuttack
19.	Punjab	34.	Government Medical College, Amritsar.
20.	Rajasthan	35.	Department of Microbiology, SMS Medical College, Jaipur.
21.	Sikkim	36.	S.T.N.M.Hospital, Gangtok
22.	TamilNadu, Madras	37.	Department of Microbiology, Instt.of Child Health and Hospital for Children
	Madurai	38.	Department of Microbiology, Medical College, Madurai.
23.	Tripura	39	District Hospital, Agartala
24.	Uttar Pradesh	40.	Department of Microbiology, K.G. Medical College, Lucknow
25.	West Bengal		--
26.	A & N Islands	41	G.B.Hospital, Port Blair
27.	Chandigarh		--
28	Dadra & Nagar Haveli		--
29.	Daman & Diu		--
30.	Delhi	42	Department of Microbiology, University College of Medical Sciences, Shahdara, Delhi.
		43.	Deptt.of Microbiology, Maulana Azad Medical College, New Delhi.
31.	Lakshadweep	44.	Govt.Hospital, Kavarati
32.	Pondicherry	45.	Government General Hospital, Pondicherry.

UNDER INDIAN COUNCIL OF MEDICAL RESEARCH

		46.	Central JALMA Instt for Leprosy, Agra
		47.	Regional Medical Research Centre, Bhubneshwar
		48.	Regional Medical Research Centre for Tribal Health, Jabalpur
		49.	Tuberculosis Research Centre, Madras.
		50.	Rajendra Memorial Research Institute, Patna.

UNDER DIRECTOR GENERAL OF ARMED FORCES MEDICAL SERVICES

		51.	Indian Naval Ship Hospital, Ashwani, Bombay
		52.	Indian Naval Ship Hospital, Cochin
		53.	Armed Forces Command Hospital, Delhi Cantt.
		54.	Department of Microbiology, Armed Forces Medical College, Pune.
		55.	Indian Naval Ship Hospital, Kalyani, Vishakapatnam

IN CENTRAL INSTITUTIONS

		56.	All India Institute of Hygiene & Public Health, Calcutta.
		57.	Department of Microbiology, JIPMER, Pondicherry.

IN AUTONOMOUS INSTITUTIONS

		58	Department of Microbiology, Instt. of Medical Sciences, Varanasi
		59	Jawahar Lal Nehru Medical college, Aligarh.
		60	Department of Immunopathology, PGI, Chandigarh.
		61	National Institute of Mental & Neurosurgery

IN PRIVATE INSTITUTIONS

		62	Kamla Nehru Memorial Hospital, Allahabad
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APPENDIX —II

ZONAL BLOOD TESTING CENTRES IN INDIA

IN VARIOUS STATE/UNION TERRITORIES

1.	Andhra Pradesh	1.	Blood Bank, Gandhi Hospital, Hyderabad.
		2.	Blood Bank, M.J.Cancer Hospital, Hyderabad.
		3.	Blood Bank, Nizam's IMS Hyderabad.
		4.	Blood Bank Instt. of Preventive Medicines, Hyderabad.
		5.	Blood Bank, Govt. Headquarters Hospital, Vijayawada.
		6.	Blood Bank, Govt. Headquarters Hospital, Karim Nagar.
		7.	Blood Bank, Govt. Headquarters Hospital, Cuddapah
		8.	Blood Bank, Govt. Headquarters Hospital, Kammam.
		9.	Blood Bank, Govt. Headquarters Hospital, Chittoor
		10.	Blood Bank, Medical college, Tirupati.
		11.	Blood Bank, Guntur Medical College, Guntur.
		12.	Blood Bank, General Hospital, Kurnool.
2.	Arunachal Pradesh	13.	Blood Bank, Government Hospital, Itanagar.
3.	Assam	14.	Blood Bank Guwahati Medical, College, Guwahati.
		15.	Blood Bank, Medical College, Dibrugarh.
		16.	Blood Bank, Medical College, Silchar

4.	Bihar	17.	Blood Bank, Medical College, Gaya
		18.	Blood Bank, Patna Medical College, Patna.
		19.	Blood Bank, District Hospital, Dhanbad.
		20.	Blood Bank, District Hospital, Jamshedpur.
		21.	Blood Bank, Jamshedpur.
		22.	Blood Bank, Rajendra Medical College, Ranchi.
		23.	Blood Bank, Medical College, Bhagalpur.
		24.	Blood Bank, Shri Krishna Medical College, Muzzafarpur
		25.	Blood Bank, Medical College, Dharbanga.
5.	Goa	26.	Blood Bank, Medical College, Panaji
		27.	Blood Bank, Civil Hospital, Panaji.
6.	Gujarat	28.	Blood Bank, Surat Medical College, Surat.
		29.	Blood Bank, Govt. Medical College
		30.	Blood Bank, B.J. Medical College, Ahmedabad.
		31.	Blood Bank, M.P. Shah Hospital, Jamnagar,
		32.	Blood Bank, District Hospital, Junagarh
		33.	Blood Bank, Civil Hospital, Amreli
7.	Haryana	34.	Blood Bank, Medical College, Rohtak
		35.	Blood Bank, District Hospital, Hissar.
		36.	Blood Bank, General Hospital, Faridabad.
		37.	Blood Bank, General Hospital, Karal
8.	Himachal Pradesh	38.	Blood Bank, Indira Gandhi Medical College, Shimla
		39.	Blood Bank, District Hospital, Dharamsala.
9.	Jammu & Kashmir	40.	Blood Bank, Govt. Hospital, Srinagar.
		41.	Blood Bank, Medical College, Jammu
10.	Karnataka	42.	Blood Bank, K.C. General Hospital, Bangalore.
		43.	Blood Bank, H.S.I.S. Hospital, Bangalore.
		44.	Blood Bank, K.M. Instt. Of Oncology, Bangalore.
		45.	Blood Bank, K.M.C. Hospital, Hubli.
		46.	Blood Bank, Kasturba Medical College, Manipal.
		47.	Blood Bank, Medical College, Bellari
		48.	Blood Bank, Kasturba Medical College, Mangalore.
		49.	Blood Bank, Medical College, Gulbarga
11.	Kerala	50.	Blood Bank, Medical College Hospital, Calicut.
		51.	Blood Bank, Govt. Hospital, Ernakulum
		52.	Blood Bank, Medical College, Trivandrum
		53.	Blood Bank, District Hospital, Trichur
		54.	Blood Bank, District Hospital, Cannanore
12.	Madhya Pradesh	55.	Blood Bank, Medical College, Bhopal
		56.	Blood Bank, Dist. Hospital Ujjain.
		57.	Blood Bank, Medical College, Gwalior
		58.	Blood Bank, D.H. Sagar
		59.	Blood Bank, Medical college, Indore.
		60.	Blood Bank, Rewa Medical college, Rewa

		61.	Blood Bank, District Hospital, Bilaspur.
		62.	Blood Bank, Medical College, Jabalpur.
		63.	Blood Bank, District Hospital, Chindwara
13.	Maharashtra	64.	Blood Bank, KEM Hospital, Bombay
		65.	Blood Bank, LTMG Hospital, Bombay
		66.	Blood Bank, BYL Nair Hospital, Bombay
		67.	Blood Bank, Haffkine Institute, Bombay.
		68.	Blood Bank, Tata Memorial Hospital, Bombay
		69.	Blood Bank, Red Cross, Bombay
		70.	Blood Bank, Cooper Hospital, Bombay
		71.	Blood Bank, Rajawadi Hospital, Bombay
		72.	Blood Bank, JJ Hospital, Bombay
		73.	Blood Bank, General Hospital, Solapur
		74.	Blood Bank, Govt. Hospital, Ulhasnagar.
		75.	Blood Bank, Sasoom Hospital, Pune.
		76.	Blood Bank, Govt. Medical college, Miraj
		77.	Blood Bank, Dist. Hospital, Chandrapur
		78.	Blood Bank, General Hospital, Kolhapur
		79.	Blood Bank, Medical college, Nagpur
14.	Manipur	80.	Blood Bank, J.N. Hospital, Imphal
15.	Meghalaya	81.	Blood Bank, Pasteur Hospital, Shillong
16.	Mizoram	82.	Blood Bank, Govt. Hospital, Aizwal
17.	Nagaland	83.	Blood Bank Dist. Hospital Dimapur
		84.	Blood Bank Dist. Hospital, Muckchong
		85.	Blood Bank, Govt. Hospital, Kohima
18.	Orissa	86.	Blood Bank, M.K.G.G. Hospital, Burla
		87.	Blood Bank, V.S.S. Medical college, Berhampur
		88.	Blood Bank, S.C.B. Medical College, Cuttack
19.	Punjab	89.	Blood Bank, Shri. Guru Tegh Bahadur Hospital, Amritsar
		90.	Blood Bank, Rajendra Hospital, Patiala
		91.	Blood Bank, Civil Hospital, Ludhiana
20.	Rajasthan	92.	Blood Bank, S.M.S. Medical College, Jaipur
		93.	Blood Bank, Medical college, Ajmer
		94.	Blood Bank, Medical College, Bikaner
		95.	Blood Bank, S.N. Medical College, Jodhpur
		96.	Blood Bank, General Medical College, Udaipur
21.	Sikkim	97.	Blood Bank, S.P.N.M. Hospital, Gangtok
22.	Tamil Nadu	98.	Blood Bank, Madras Medical college, Madras.
		99.	Blood Bank, Stanley Medical college, Madras.
		100.	Blood Bank, Kilpak Medical college, Kilpak, Madras.
		101.	Blood Bank, Govt. Royapettah Hospital, Madras.
		102.	Blood Bank, Apollo Hospital, Madras
		103.	Blood Bank, Madurai Medical College, Madras
		104.	Blood Bank, S.G. Hospital, Madras
		105.	Blood Bank Central, Egmore, Madras

		106.	Blood Bank, Govt.Hospital, Coimbatore
		107.	Blood Bank, Govt.Hospital, Salem
		108.	Blood Bank, Govt.Hospital, Tiruchirapalli
		109.	Blood Bank Medical College, Tirunelveli
23.	Tripura	110.	Blood Bank, G.B.Hospital, Agartala.
24.	Uttar Pradesh	111.	Blood Bank, Dist.Hospital, Gorakhpur
		112.	Blood Bank, G.S.V.Medical College, Kanpur
		113.	Blood Bank,Dist.Hospital, Allahabad
		114.	Blood Bank, K.L.Sharma Hospital, Meerut
		115.	Blood Bank, K.G.Medical college, Lucknow
		116.	Blood Bank, S.G.P.G.I.Lucknow
		117.	Blood Bank, Medical College, Agra
		118.	Blood Bank, Dist.Hospital, Dehradun
		119.	Blood Bank, Dist.Hospital, Nainital
		120.	Blood Bank, Dist.Hospital, Shahjahanpur
		121.	Blood Bank, M.L.D.Medical college, Jhansi
25.	West Bengal	122.	Central Blood Bank, Calcutta
		123.	Blood Bank, C.N.M.C.H.Calcutta
		124.	Blood Bank, N.R.S.M.C.H.Calcutta
		125.	Blood Bank, R.G.K.A.R.M.C.H.Calcutta
		126.	Blood Bank, S.S.K.M.Calcutta
		127.	Blood Bank, Dist.Hospital, West, Dinajpur
		128.	Blood Bank, NorthBengal Medical
		129.	Blood Bank, Dist.Hospital, Jalpaiguri
		130.	Blood Bank, State Hospital, Burdwan
	A & N Islands	131.	Blood Bank, G.B.Pant Hospital, Port Blair.
26.			
27.	Chandigarh		--
28.	Dadra & Nagar Haveli		
29.	Daman & Diu		--
30.	Delhi	132.	Blood Bank, G.T.B.Hospital, Shahdara, Delhi
		133.	BloodBank,Hindu Rao Hospital, N.Delhi
		134.	Blood Bank LNJP /MAMC Hospital, N.D.
31.	Lakshadweep		--
32.	Pondicherry		--
UNDER INDIAN COUNCIL OF MEDICAL RESEARCH			
		135.	Blood Bank, Bhubaneswar
		136.	Blood Bank, Instt.of Pathology, New Delhi.

UNDER DIRECTOR GENERAL OF ARMED FORCES MEDICAL SERVICES

	137.	Blood Bank Command Hospital, Bangalore.
	138.	Blood Bank Comman Pathology Lab, Eastern Command, Calcutta.
	139.	Blood Bank Armed Forces Command Hospital, Delhi Cantt.
	140.	Blood Bank Command Pathology Lab, Central Command, Lucknow
	141.	Blood Bank Armed Forces Medical, College, Pune
	142.	Blood Bank Command Hospsital, Northern Commd. Udhampur.

IN CENTRAL INSTITUTIONS

	143.	Blood Bank, Lady Hardinge Medical, College, New Delhi.
	144.	Blood Bank, Blood Transfusion Services, Safdarjung Hospital. New Delhi.
	145.	Blood Bank, Jipmer, Pondicherry

IN AUTONOMOUS INSTITUTION (Other than ICMR)

	146.	Blood Bank, Medical College Banaras Hindu University, Varanasi.
	147.	Blood Bank, AIIMS, New Delhi.
	148.	Blood Bank, Indian Red Cross, Society, New Delhi.
	149.	Blood Bank, PGI, Chandigarh.

IN PRIVATE INSTITUTIONS

	150.	Blood Bank, Christian Medical, College, Vellore.
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GLOSSARY ON HIV/AIDS

- AIDS** : An acronym from the abbreviation AIDS. A shortening of the full form, Acquired Immuno Deficiency Syndrome. A group of symptoms and signs caused by the Human Immune Deficiency Virus (HIV)
- AIDS Test** : The HIV antibody test. A laboratory test done on a small sample of a person's blood to detect the presence or absence of HIV antibodies. These antibodies indicate, whether an individual has been exposed to the virus or not.
- Anaemia** : A condition marked by a low number of red blood cells and associated with weakness and fatigue.
- Antibodies** : Substances produced by white blood cells in response to antigens. They fight off bacteria, viruses and other organisms, which attack our bodies and cause disease. In the case of HIV, antibodies produced by the body are not effective in neutralizing the virus. These antibodies serve as markers for the presence of or exposure to HIV.
- Antibody Positive** : Means a person has been exposed to HIV and that his immune system has developed antibodies to it. An HIV antibody test will give a positive result for the presence of HIV antibodies. The person may look and feel perfectly well but is potentially infectious and can pass the virus on to others.
- Anus** : The external opening of the bowel.
- ARC** : AIDS-Related Complex/Condition. A term for the possible combination of conditions experienced by people with symptomatic HIV infection.
- Artificial Insemination** : The introduction of semen into the vagina or uterus to induce pregnancy by non-sexual means.
- B-Cell** : A lymphocyte which matures in the bone marrow, and produces antibodies to pathogens.
- Bacteria** : Often called germs, these are single-cell organisms, visible only under a microscope. They can usually be treated with antibiotics.

Bi-Sexual	: People who engage in sexual activities with people of both sexes.
Blood Count	: The number of red and white blood cells in the bloodstream.
Carrier	: A person who appears well but is capable of transmitting an infection to another person. Carriers have no outward signs or symptoms of the disease they are carrying.
CD4 Cell	: A type of lymphocyte crucial to the normal functioning of the immune system. Also known as T4 cells, CD4+lymphocytes and T-helper lymphocytes; they are the principal target cells for HIV infection.
Cerebrospinal Fluid(CSF)	: The fluid found within the cavities of the brain Fluid and surrounding both the brain and the spinal cord.
Chancroid	: Chancroid is an STD transmitted through sexual contact. This disease is very common among men who have frequent contact with prostitutes. Usually within about seven days of the exposure, symptoms start appearing. Painful and open sores on the genitals accompanied by swollen tender lymph nodes in the groin are the common symptoms. In women, the symptoms are less noticeable. The common symptoms that appear in women include painful urination, painful defecation, painful intercourse, rectal bleeding and vaginal discharge.
Client	: The person seeking or receiving HIV counselling and/or testing. In the case of a child or other person unable to consent to testing on his/her own behalf, the client is the parent or other adult with the ethical and legal competence to do so.
Clotting Factors	: Protiens essential to blood coagulation found in the bloodstream; absence of these protiens leads to prolonged, sometimes pathological bleeding as in hemophilia.
Condoms	: Condom is a sheath used to cover the penis during sexual intercourse. In India, it is propagated as a method of Family Planning. This is an artificial way to avoid pregnancy. Now a days, a lot of publicity is given for using Condoms against HIV infection. The Catholic Church does not approve Condom use. It may be noted that Condom does not guarantee safety and protection against pregnancy as well as HIV/AIDS.

- Counselling** : A confidential dialogue between a client and a counsellor (usually professionally trained), aimed at enabling the client to cope with stress and take personal decisions related to HIV/AIDS.
- Dementia** : The last stage of AIDS infection. A progressive impairment of intellectual function with marked compromise in at least three of the following areas of mental function: language, memory, visuospatial skills, personality and cognition.
- ELISA** : Enzyme-linked immunosorbent assay, a test employed to detect the presence of HIV antibody.
- Factor VIII** : That factor in the blood which is essential to clotting. People with haemophilia type A have a Factor VIII deficiency and people with severe haemophilia require frequent Factor VIII replacement with specially prepared blood products.
- Genital Herpes** : Genital herpes is a painful STD which has no known cure as yet. It is a contagious viral infection and affects millions each year. This infection is caused by the herpes simplex virus (HSV). There are two types of HSV. HSV-1 causes sores on the lips and genitals while HSV-2 most often develops sores on genitals and also in the mouth. Reported cases of genital herpes indicate that HSV-1 and HSV-2 produces sores around vaginal area, on the penis, around anal opening, on the buttocks as well as thighs. This virus remains in certain nerve cells of the body for life. However, some people infected with HSV may never show any symptoms. Genital herpes is usually transmitted by sexual contact - vaginal, oral and anal.
- Genital Warts** : Genital Warts are caused by certain types of HPV. Genital warts are contagious and are spread by sexual contact. The warts usually occur within three months of exposure.
- Gonorrhea** : A sexually transmitted disease causing inflammation most often in the genitourinary tract.
- GUD** : Genital Ulcer Disease.
- Haemophilia** : An inherited condition which mainly affects men. The condition involves a reduced capacity for the blood to clot due to a deficiency of Factor VIII. Consequently, an otherwise minor accident can be dangerous because the person continues to bleed. Most bleeding occurs internally.

Hepatitis	: There are several types of hepatitis virus, which can cause disease in humans. Infection with any hepatitis virus can result in a mild illness that is often undetectable. However, more severe forms of illness, even death, may result in some cases. Chronic infection with hepatitis B virus also exposes the individual to a higher risk of developing liver cancer.
	The three types of hepatitis virus are transmitted differently.
	<ul style="list-style-type: none"> * Type A through the faecal-oral route. * Type B through sexual intercourse by the introduction of infected seminal fluids, blood and blood products, and sharing of needles and syringes. * Non A Non B, and Type B, through infected blood and blood products.
Herpes	: There are two major types of herpes simplex virus (Types I and II) in humans. Some herpes viruses cause cold sores and some cause genital herpes. Genital herpes is a common opportunistic infection in people with AIDS.
HIV	: Human Immunodeficiency Virus. The virus which causes AIDS and renders the human immune system deficient and unable to resist opportunistic infections.
Homo-sexuality	: A broad category which refers to the general phenomenon of sexual relationship between persons of the same sex. The Catholic church does not approve of this type of relationship which is un-natural.
Human Papillomavirus	: Human Papillomavirus (HPV) is one of the common STDs that affects men and women. It is reported that there are over 60 types of HPV. Like many STDs, most HPV infections often do cause visible symptoms.
Immune Deficiency	: When a person's immune system cannot satisfactorily protect the body, resulting in an increased susceptibility to various infections.
Immune System	: The body's defence system against attack by bacteria, viruses, harmful food substances and some proteins. It consists of cells which, among other things, produce circulating substances called antibodies. Antibodies can recognize materials or agents as foreign and then attempt to neutralise or eliminate them without injury to the host's tissues.

Immuno-deficiency	:	Any decrement in the ability of the immune system to respond appropriately to foreign substances or organisms.
Infectious	:	A person is infectious, when he/she has been infected with a pathogen, like HIV, and is capable of transmitting that pathogen to another person. In all categories of HIV infection a person is considered infectious for life.
Incubation Period	:	The time between infection with a disease-causing organism and the onset of the visible signs and symptoms of the disease.
Infection	:	The invasion of a host by organisms such as viruses, fungi, protozoa, or bacteria with consequent disease.
Intravenous (IV)		Injected or delivered through a needle into a vein.
IV Needles	:	Intra-venous needles. Needles used to inject drugs directly into the bloodstream. They are inserted into veins.
IVDU	:	Intra-venous drug user, self-injects substances directly into veins.
Kaposi's	:	A rare cancer - a tumour of the walls of blood.
Lesbian	:	Refers to women who involve in sexual relationship with other women. The Catholic Church does not approve of same sex relationship which is un-natural in itself.
Lymph Glands	:	These are small nodes, which usually contain large numbers of white bodied cells. Agents of infection may be gathered around these areas and so they become battle grounds. Infections can therefore cause swelling of these glands.
Lymphocytes	:	A class of white blood cells responsible for regulation of the immune system. Divided into B-cells (which produce antibodies) and T-Cells.
Monogamous	:	Relationship exclusively between two people of the opposite sex. The most ideal way of life approved by social norms. The Catholic Church approves of only a monogamous marital life.
Opportunistic Infections	:	Organisms which cause infection in individuals with an impaired immune system.
Pandemic	:	An epidemic over a wide geographic area, usually worldwide.

Parasite	: An organism that lives solely in/on another. Lice, mites and fungi and all parasites which may live in/or humans and in doing so sometimes cause disease.
Pathogen	: A living micro-organism or virus capable of producing a disease.
PGL	: Persistently enlarged lymph glands.
Pneumocystis	: One of the opportunistic Carinii Pneumonia (PCP) infections seen in immune suppressed people. It is caused by a very common airborne organism which is normally destroyed by healthy immune systems. It is one of the most common opportunistic infection seen in people with AIDS.
Pneumonia	: A type of inflammation of the lungs usually associated with infection with a micro-organism.
Post-test Counselling	: Dialogue between a client and a counsellor aimed at discussing the HIV test result and providing appropriate information, support and referral, and encouraging risk-reduction behaviour to those testing positive. In case the test results are negative, the client is encouraged to shun all types of high risk behaviours.
Pregnancy	: In relation to AIDS, pregnancy is considered unwise for a woman who is HIV antibody positive. Pregnancy may hasten development of the disease. The baby of a HIV antibody positive mother can be infected with HIV in the womb, or during birth.
Pre-natal	: Existing or occurring before birth.
Pre-test Counselling	: Dialogue between a client and a care provider aimed at discussing the HIV test and the possible implications of knowing one's HIV Sero status, which leads to an informed decision whether or not take the test.
Protein	: Molecules found in all forms of life that are the principal components of all tissues.
Public Lice	: Public Lice are parasites which often spread by sexual contacts. One must be extremely careful to avoid handling and touching the clothing and bedding of an infected person. People who visit red light districts for sex as well as those who go to brothels are likely to get infected with these tiny insects. These lice are visible to the naked eye. They are pinhead in size oval in shape and appear reddish-brown when full with the blood of the host.

Retrovirus	:	Retroviruses are a class of viruses characterized by their ability to convert RNA to DNA during replication in the host cell (instead of the reverse as in most other pathogenic viruses). To do this, it requires an enzyme called reverse transcriptase. HIV belongs to this group of viruses.
Reverse	:	An enzyme which HIV uses to replicate itself.
Risk group	:	A group of individuals sharing a common behaviour or characteristically placing them at a risk for HIV infection that is higher than the general population.
RNA	:	Ribonucleic Acid. Genetic material inside a cell.
Scabies	:	Scabies are usually transmitted through sexual contact. However, it is also transmitted through contact with sheets, towels and furniture being used by those already infected. The scabies mite cause intense itching. Apart from genitals, the areas most affected include hands (especially between fingers), wrists, elbows and lower abdomen.
Sero-conversion	:	When an individual, who is HIV antibody negative becomes HIV antibody positive after exposure to the virus i.e. blood serum has converted from negative to positive. During this process the person may suffer an acute illness. In the case of HIV infection, the symptoms may be those of flu and/or swollen glands. Sometimes no symptoms are experienced.
STD	:	An abbreviation of the term Sexually Transmissible Disease. Any disease which may be passed on sexually.
Sero-positivity	:	Synonymous with antibody positivity.
Sero-negativity	:	The absence of antibodies directed against HIV and indicative of no infection, synonymous with antibody negativity.
Syndrome	:	A set of symptoms and signs resulting from a single cause, or so commonly occurring together that a definite pattern is apparent.
Syphilis	:	Syphilis is an STD caused by bacterium called Trephonema Pallidum. This bacterium can move throughout the body, damaging many organs in course of time. Physicians describe the course of this disease by dividing it into four stages-primary, secondary, latent and tertiary. A person who is infected may infect others during the first two stages and during the latent

stage if he/she does not get treatment. These three stages usually lasts one to two years. However, during the tertiary stage, untreated syphilis, although not contagious, can cause serious abnormalities, mental disorders, blindness, other neurological problems and death.

- Tattooing** : Tattooing the body with various figures of animals or plants or with scrolls, has been in use from the most ancient times. It is a process by which a permanent coloured mark, design or emblem is made on the body by the introduction of pigment through ruptures in the skin.
- Thalassemia** : A hereditary disease, widespread in the Mediterranean countries, Asia and Africa, in which there is an abnormality in the protein part of the haemoglobin molecule. The affected red cells cannot function normally leading to anaemia. Other symptoms include enlargement of the spleen and abnormalities of the bone marrow. Patients with this major disease are treated with repeated blood transfusions.
- T-Helper Cells** : Also called T4 cells. This is one type of white blood cell or lymphocyte that helps in defending against the disease by initiating antibody production. In people with AIDS, T-helper cells are so depleted that the immune system no longer fights off disease and opportunistic infections can occur.
- Transmission** : The spread of infectious pathogens from one person to another. The most common methods of HIV transmission are by allowing infected blood, semen and vaginal fluid into the body during sex and by allowing infected blood into the body by sharing IVDU equipment.
- Trichomoniasis** : Trichomoniasis is another STD that often develops without any symptoms. If symptoms occur, they usually appear within 4 to 20 days of exposure. In some cases symptoms may occur years after infection. In women some of the symptoms that can be noticed include a heavy, yellow-green or gray vaginal discharge, discomfort during intercourse, vaginal odor, and painful urination. Irritation and itching of the female genital area and lower abdominal pain are other symptoms. In men, the symptoms include a thin, whitish discharge from the penis and painful urination. However, most men may not show any symptoms.

- Vaccine** : A substance which contains antigen of an organism. In the vaccinated person, it stimulates active immunity and future protection against infection by that organism.
- Virus** : An extremely small organism visible only through an electron microscope. Viruses cause a wide variety of diseases in humans. They do not respond to treatment with antibiotics.
- Western blot** : A test to diagnose HIV infection through detection of antibodies against the virus.
- Window Period** : The period of time when a person may be infected with HIV, but before antibodies have been formed. This period is usually two to three weeks and is rarely longer than three months. The virus is in the blood and may be detected by an antigen test, but an antibody test will prove negative.

